NINETEENTH ANNUAL REPORT

OF THE

State Board of Health

OF

SOUTH CAROLINA,

FOR THE

Fiscal Year 1898,

TO THE

LEGISLATURE OF SOUTH CAROLINA.

COLUMBIA, S. C.
THE BRYAN PRINTING CO., STATE PRINTERS.
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HON. J. P. DERHAM, Comptroller General.
JAMES EVANS, M. D., Secretary.

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G. M. DEAN.
ATTORNEY GENERAL BELLINGER.

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DR. JAMES EVANS.
ROBERT WILSON.
C. M. REES.

On Quarantine:
C. M. REES.
JAMES EVANS.
ATTORNEY GENERAL BELLINGER.

On Registration of Vital Statistics:
JAMES EVANS.
COMPTROLLER GENERAL J. P. DERHAM.
W. H. NARDIN.

On Finance:
A. A. MOORE.
G. M. DEAN.
COMPTROLLER GENERAL J. P. DERHAM.

On Sanitary Regulation of Schools:
ROBERT WILSON.
W. H. NARDIN.
G. R. DEAN.

On Sanitary Condition of State Penal and Charitable Institutions:
A. A. MOORE.
ATTORNEY GENERAL BELLINGER.
COMPTROLLER GENERAL J. P. DERHAM.

On Local and Sub-Boards of Health:
W. H. NARDIN.
JAMES EVANS.
ATTORNEY GENERAL BELLINGER.

LETTER OF TRANSMITTAL.

To His Excellency W. H. Ellerbe, Governor of the State of South Carolina.

Dear Sir: I have the honor to present to you for transmittal to both branches of the General Assembly the annual report of the State Board of Health.

Our Board has endeavored to discharge the responsible duties devolved upon it by statute, but it has been unable to do so, by lack of sufficient appropriation. The last session of the Legislature only appropriated $1,500 for all the purposes of the Board, and of this amount the Comptroller General retained $523 to pay for printing the annual report, only leaving $977 to conduct the responsible duties imposed upon us by statute. It is needless to say that this was inadequate, as the Board could not have the regular meetings to discuss and enforce quarantine by land and sea, the inspection of State penal and charitable institutions and other important duties, nor could we send delegates to the conferences of State Boards of Health, or have any representative at the several quarantine conventions held during the past year. We would most earnestly request you to urge upon the General Assembly to give us an appropriation sufficient for this purpose; also, that a sufficient number of our reports be printed so as to allow us to exchange with other State Boards of Health and other sanitary and scientific bodies who request us to do so.

The outbreak of smallpox at several points in the State has been a source of grave anxiety to your Board, and the $3,000 contingent fund was exhausted, under the zealous and efficient direction of the Secretary of the Board, who is chairman of the Committee on Epidemic and Endemic Diseases, the personal sacrifices and professional skill of Dr. James Evans should be appreciated by the entire State. The fund did not suffice, and through your wise discretion additional amounts were afforded, that, with strict economy, held the disease in check. The outbreak is again upon the State, and we would request that the contingent fund be increased to $10,000, so that prompt means may be carried out to stamp out the disease.

We would also suggest that, to secure prompt attention to arrest the spread of epidemic disease in the rural regions and outside of

corporations, the Acts establishing local Boards of Health should not be confined to incorporated towns and cities, but should be extended to the townships, so there will be established and in operation health organizations in every township in the State.

The Health Officer in every city, town and township should be required to report the presence of any contagious or infectious disease the day of its discovery, and a penalty should be attached for any neglect of this duty, in the way of a fine, which should be imposed and collected, by the Solicitor of the Circuit.

The State Board of Health should have power to establish quarantine, and in order to maintain it given authority to make arrests, and, with authority and organization extending to every township, it would be comparatively easy to control epidemics.

In order to verify the true causes of disease it is most essential that the physicians of the entire State and the several Boards of Health should have competent authority to decide upon the several agents that produce disease, and to establish this a bacteriological laboratory should be equipped and placed under the charge of an expert physician, well versed in the science of biological investigation, where the sputa of consumption, the execretions of the throat in diphtheria, the blood in typhoid fever, polluted water and contaminated milk and food examined and the exact nature of the disease positively *given,* so that the physician and sanitarian could be relieved of doubt, and take precautions and prevent the spread of disease.

We would suggest that the Legislature make an appropriation of $800 for this important and life-saving work. We can have the use of the laboratory of the Medical College of the State of South Carolina, as now used by the city of Charleston for such investigation, and thus save the expense of equipment, and the services of a most competent and conscientious bacteriologist can be secured for the benefit of the State at large.

The reports of the several sub-committees of the State Board contain much of interest relating to quarantine. The sanitary inspection of State penal and charitable institutions show much to commend, yet much food for thought is given by the great prevalence of consumption in the Penitentiary and State Hospital for the Insane. The efficient physicians in charge of these institutions have reported as to the abatement of the causes, and their advice should be heeded.

The prevalence of infectious and contagious disease in several of the educational institutions in the State show defects in management and in the enforcement of sanitation. Power should be given to the State Board of Health to inspect all such institutions, and the sys-

tems of ventilation, heating, sewerage, plumbing and water supply should be examined, and when defective these conditions should be ordered to conform to the teachings of Sanitary law.

Respectfully submitted.

T. GRANGE SIMONS,

Chairman Executive Committee South Carolina State Board of Health.

Annual Report of Chairman State Board of Health.

The Chairman of the State Board of Health presents his annual report with some degree of misgiving. Much has occurred to dampen the zeal of its members. Death claimed two successive chairmen within a few months of each other. The reduction of the appropriation by the General Assembly of the State to $1,500, of which $523 was retained by the Comptroller General for printing expenses of our report, and the Legislature thus left us less than $1,000 to conduct the affairs of the Board for the past year, so that our meetings had to be reduced in number, and at the present meeting the members will only receive money enough to pay their railroad fares, as no mileage or per diem as allowed can be had until the Legislature gives us a sufficient appropriation to conduct the responsible duties devolved upon us by statute. We trust that a spirit of justice will prevail and a more liberal appropriation will be given us, for we are not able to even have sufficient copies of our reports for exchange with other State Boards of Health and the other sanitary and scientific institutions at home and abroad that desire and apply for our publications. When the State Board of Health was allowed to have its own printing executed by printers of our own selection we had always a sufficient number of extra copies to supply the demand made upon us, nor do I think that the cost was in excess of what is now charged for printing the 300 copies for the members of the House and Senate.

WATER SUPPLY AND DRAINAGE.

With the increase of population and the magnitude and importance of our ever increasing manufacturing industries comes the greater necessity of protecting the lives of our people by securing a proper water supply for the cities and towns and to protect such sources of supply from pollution, and with equal need we should regard the proper disposal of sewerage and waste from the human habitations and industrial centres that each year insures the pollution of the rivers and streams of our State, and with the establishment of bleacheries and dye works this pollution will increase and render the streams more unfit to supply potable water to our people. The present sup-

ply of several communities affords grounds for the opinion that this pollution is already great and that typhoid fever, dysentery, results from this cause increasing contamination of the water supply. It has been proven that the water supply of several of our State educational institutions were a source of disease to those who were compelled to use the water to drink or for use in the dairies; doubtless like conditions exist elsewhere in the State. We would suggest that the power of the State Board of Health be extended so as to empower them to inspect all educational, penal and charitable institutions in the State, if such be consistent with law, or to confer this power so as to apply to all receiving aid or support from State or county funds. Much of this work could be carried by municipal health officers or by special officials empowered by the State Board of Health. Then local outburst of disease could be promptly arrested by proper sanitary inspection and prompt measures for abatement of causes injurious to health. We would at the same time suggest that a bacteriologist be selected and a laboratory be equipped for biological studies and investigation for the detection of disease germs and proper analysis of infected or polluted waters, milk or other food supplies.

TRANSPORTATION OF DEAD BODIES AND RULES REGULATING SUCH.

At the last conference of the State and Provincial Boards of Health, held in Nashville, Tenn., August 18th, 1898, among other interesting discussions was this important matter, so pregnant with danger of having contagious and infectious disease introduced by careless preparation and transportation of the bodies of the dead. This matter appeals to us with a degre of force at this time, for the bodies of our soldiers from the recently acquired tropical territories may be regarded as an element of danger in introducing disease. The conference in Nashville appointed a committee to confer with a like committee from the National Association of Undertakers, and rules regulating such transportation, after proper preparation of dead bodies. I would suggest that this State Board pay attention to this important matter and present to the Legislature proper bills to establish a proper law regulating the matter.

I would also request the attention of the Board to the Bertilin system of vital statistical returns and disease classification.

THE MEMPHIS NATIONAL QUARANTINE CONFERENCE.

The return of yellow fever in epidemic form in the several States along the Mississippi River and the Gulf this summer has occasioned

much alarm among the commercial bodies and a convention was called by the local commercial bodies in Memphis to meet there on the 10th of November last. I received an invitation, as your Chairman, to attend the meeting and express my views. I could not attend, but submitted a paper in response to the circular letter requesting opinions on several propositions to be discussed by the convention. I submit the queries and my responses:

Memphis, Tenn., November 7, 1898.

To the President of State Board of Health of South Carolina.

Dear Sir: The convention to formulate plans for a more effective national quarantine (as per resolutions enclosed) will be held in this city, November 17, 18 and 19.

The committee in charge hereby extend an invitation to you to attend as a delegate. They feel it would be a great advantage that you should do so, as they believe you are in sympathy with this very important movement.

It is expected that this convention, made up of men who have the question at heart, will point the way to some system of Quarantine that will be effective.

Kindly advise the Secretary if you can favor us with your presence.

Yours very truly,

J. S. MENKEN,
Chairman.

FRED. ORGILL, Secretary.

SUGGESTIONS TO DELEGATES TO THE QUARANTINE CONVENTION AT MEMPHIS, NOVEMBER 17TH, 18TH AND 19TH, 1898.

For the purpose of facilitating the work of the Quarantine Convention about to be held in this city, it is suggested that all delegates put in writing any suggestions which may occur to them with reference to the general subject, and in particular with reference to the following matters:

1st. Shall the work of enforcing the new law be left to the Marine Hospital Service, or shall a Health Bureau be organized for the purpose?

2d. Shall the powers conferred be limited to a quarantine of the coast and coast cities, or shall they be more extensive? And in the

event you favor a maritime quarantine only, what measures should be taken to prevent the spread of yellow fever should it, by any accident or oversight, evade the maritime quarantine?

3d. If the yellow fever appears in the United States, is it best fought by quarantining all cities in the fever belt against the infected point, or by establishing such detention camps at the infected point, and taking such measures as may be deemed necessary to prevent the spread of the disease?

4th. Would not the enforcement of the latter plan by the Federal authorities afford the greatest security and feeling of security to the people?

5th. Shall the discovery and proclamation of yellow fever be left to local authorities, or made the duty of such Federal department?

Where several delegates come from one city, it is hoped that they will be able to organize before leaving home and adopt resolutions embodying their views on these and other kindred subjects which the Convention will be called to pass upon. We trust that all such written suggestions, opinions and resolutions will be forwarded by mail to the undersigned at the earliest possible moment. If they are not ready sooner, they can be handed to the Secretary of the Convention for transmission to the Committee on Resolutions.

This has seemed the best method for arriving rapidly at the views of delegates in order to assist the Committee on Resolutions in drafting the final measures for submission to the Convention.

Charleston, S. C., November 15, 1898.

J. S. Menken, Chairman Memphis National Quarantine Committee.

Dear Sir: Your circular letter of November 7th, inviting me to attend a "Convention to formulate plans for a more effective National Quarantine," received. I regret that I will not be able to attend and again to visit Memphis, where I witnessed the dread epidemic of 1878, and served with the Howard Medical Corps.

I do not hesitate to give you my views on the suggestion proposed for consideration by the convention.

1st. I am convinced that it will be best to have the "work of enforcing the new law" carried out by a national "Health Bureau organized for the purpose"—the said bureau to be composed of representatives from the several State Boards of Health, who, with their executive officers, be fully organized and empowered to deal with all matters relating to public health, to prevent or arrest the spread of all epidemic and endemic disease, to collect vital statistics, to deal with demographic and hygienic and sanitary measures for the wel-

fare of all portions of the United States; such National Bureau of Health to have given them ample money appropriations to deal with all matters relating to the preservation of the health of the whole people of the United States and its territories. Such a bill has been presented to Congress, and has the approval of the American Medical Association, the American Public Health Association and the State Boards of Health, and many of the local Boards of Health of the large commercial centres. I am positively opposed to any increase of power whereby the United States Marine Hospital Service shall have control of such work. Their functions are to take care of the sick and disabled seamen of the merchant marine, and should be limited to such work. In the past the manner of conducting the public health service has not been such as has secured either safety from epidemic disease, nor has public confidence been secured by the United States Marine Hospital service; nor have State or local Boards of Health placed confidence in their methods to any degree. The desire for the exercise of despotic power, as shown by the provisions of the Caffery bill, is to be dreaded, and this bill has the support of the United States Merchant Marine Hospital Service. Should this bill become law, woe betide the unfortunate but honest health official who incurs the penalties proposed. All State and local health powers can be set aside, no matter what the experience or professional standing of the officials. All army and navy surgeons, no matter how exalted their rank, or how long and meritorious their service, are "ordered to report for duty," when assigned to a station. The tyro of the United States Marine Hospital Service is directed to "take command" of the designated station. Experience has demonstrated the fact that often there is no fitness for the "command." There will be no sense of security felt by the community, nor can harmony of action between the State and local health authorities be fostered by the Marine Hospital controlling national quarantine or any other matters relating to the preservation of public health.

The other questions propounded do not require, I think, specific reply; the details of each and every one can only be acted upon with the full knowledge of the several conditions of environment.

Yours respectfully,

T. GRANGE SIMONS, M. D.,
Chairman South Carolina State Board of Health.

The convention adjourned, after two days' session, and its recommendations were that Congress by enactment establish a National Health organization, under control of the United States Treasury

Department, and that the several State health organizations be represented in the national body.

We would again urge upon our Senators and Representatives in Washington to support the Spooner bill as to the National Board of Health. We would request of them to support the bill introduced by the Hon. William Elliott as to the appointment of a special commissioner to study the cause of yellow fever. This bill has the endorsement of the Humane Public Health Association and the American Medical Association and the approval of the President, who has recommended the appointment of the commission in his annual message to Congress.

T. GRANGE SIMONS,
Chairman S. C. State Board of Health.

Statement Showing Usual Amount of Appropriation to the Principal State Boards of Health in the United States in the Order of Comparative Amount of Appropriation.

States.	Amount of Appropriation.	Salary of Secretary.	Population in 1890.	Expense Per Capita.	Estimated Wealth in 1890.
Massachusetts	$57,000	$3,000	2,258,943	21.67 mills.	$2,623,000,000
New York	30,000	5,500	5,987,853	5. mills.	6,308,000,000
Alabama	9,000	1.800	1,513,017	5.88 mills.	428,000,000
Illinois	9,000	3,000	3,826,351	2.33 mills.	3,210,000,000
Minnesota	9,000	2,500	1,301,826	5.87 mills.	792,000,000
Michigan	6.000	2,500	2,993,819	2.87 mills.	1,580,000,000
Pennsylvania	6,000	2,000	5,353,014	1.15 mills.	4,942,000,000
Wisconsin	5,200	2,500	1,636,830	3.06 mills.	1,139,000,000
New Hampshire	3,500	2,500	376,530	9.33 mills.	363,000,000
Rhode Island	3,000	2,300	349,506	8.67 mills.	400,000,000

NOTE.—These appropriations are solely for internal sanitation and not for external or seaboard quarantine.

ILLINOIS.

This State has a special fund of $40,000 for emergencies.

PENNSYLVANIA.

This State has a special fund of $50,000 for emergenctes, only to be used at the discretion of the Governor.

STATE REGISTRATION OF VITAL STATISTICS.

States.	Number of Clerks.	Amount of Salaries.	Population.
New York	Not ascertained	$8,000 00	5,987.853
Michigan	Seven	7,000 00	2,093,889
Massachusetts	Five Clerks and an Editor	4,220 00	2,238,945
Rhode Island	One	500 00	379,579
Pennsylvania	None		5,268.014

LOCAL BOARDS OF HEALTH.

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GREENWOOD—P. S. Dew.

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Has none.

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KERSHAW—J. E. W. Haile, M. D., President; O. Floyd, T. J. Gregory, J. A. McCaskill, J. B. Witherspoon, Secretary.

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BLENHEIM—W. J. Atkinson.
CLIO—Dr. J. A. Woodley, W. A. Henshaw, W. C. Smith, John W. Welch, S. L. Stanton.

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LITTLE MOUNTAIN—Dr. Jno. M. Sease.

PROSPERITY—Dr. A. F. Langford, President; B. L. Darmick, J. B. Fellers, H. S. Boozer, Francis Bobb.

OCONEE COUNTY.

WALHALLA—J. W. Shelor, President; J. W. Bell, Secretary; C. W. Pitchford, A. P. Terhune, V. F. Martin.

SENECA—Dr. J. B. Brown, President; B. F. Sloan, Secretary; Dr. G. L. Martin, M. W. Coleman, O. F. Bacon.

WESTMINSTER—Dr. J. W. Quillian.

CLEMSON COLLEGE—Dr. Redfearn, Dr. P. H. E. Sloan, T. Q. Donaldson, W. L. McGee.

WESTMINSTER—J. W. Quillian, M. D.; A. Zimmerman, Secretary; B. H. Cross.

ORANGEBURG COUNTY.

ELLOREE—W. T. Stack, Jr., Secretary,

LIVINGSTON—Dr. Thos. J. Pou, Chairman; J. C. Wooley, J. W. Gantt.

NORWAY—Dr. R. R. Stephens, C. H. Able.

NORTH—Dr. T. F. Williams.

ORANGEBURG—W. G. Albergotti.

FORT MOTTE—Dr. W. W. Wolfe, President; G. W. Killard, Thos. I. Hopkins, Jno. D. Maynard, David Christie, Secretary.

WOODFORD—Dr. J. M. Davis, S. W. Livingston, Joseph Wingard, J. R. Dissenganner, S. J. Jernow.

VANCE—E. L. Dantzler, Dr. W. H. Lawton, D. J. Avinger, A. P. Avinger, Jr., J. L. Banister.

BRANCHVILLE—J. Karesh, President; Dr. W. L. Reeves, Secretary; W. C. Crum, H. O.; W. P. Dukes, W. L. Wolfe.

ORANGEBURG—F. DeMars.

SALLY—Thos. Stansell, E. A. Glover, A. F. Dicks, Dr. J. A. Millhous, Dr. H. J. Sally.

ROWESVILLE—Dr. A. O. Bowman, Chairman; W. L. Wolfe, W. P. Dukes, Jas. A. Boone, Jno. F. Simmons, Secretary.

PICKENS COUNTY.

LIBERTY—W. A. Sheldon, W. O. Willard, B. H. Callahan, J. S. Smith, R. C. Robinson, C. H. Parkins.

EASLEY—H. E. Russell, Chairman; W. A. Mauldin, B. C. Johnson, J. T. Lathem, Dr. C. W. Wyatt.

FORT HILL—Dr. A. E. Hines, W. L. Poor, E. T. Lovell.

RICHLAND COUNTY.

COLUMBIA—Dr. R. W. Gibbes, W. K. Griffith, C. F. Hoefer, J. C. C. Robertson, F. VanBenthuysen, Dr. A. E. Boozer, J. L. Casey, O. E. Thomas, Edward Ehrlich, John A. Jennings, Dr. L. B. Owens, H. J. Hennies, Alonzo Monckton, R. McDougall, J. G. Graham, U. R. Brooks, Secretary.

SALUDA COUNTY.

SALUDA—J. J. Buster, W. E. Black, T. B. Holly.

SPARTANBURG COUNTY.

COWPENS—Dr. Chas. Sims, W. H. Wheat, W. O. Turner, D. S. Lipscomb, E. Potter.

ENOREE—Dr. J. A. Allen, President; Rev. J. M. Friday, Secretary; Thos. W. Colley, Martin Mitchell, N. G. Waldrop.

SPARTANBURG—Dr. Blake.

LANDRUM—Dr. E. W. Pressley, Dr. J. W. Campbell, R. A. Clinton.

INMAN—Dr. W. J. Lexton, President; J. H. Ballenger, H. M. Bishop, W. B. Kincaid, E. P. Prince.

REIDVILLE—Dr. B. O. Bennett, Dr. W. A. Harrison, E. R. Thackston.

SUMTER COUNTY.

MAYESVILLE—Dr. C. E. King, T. W. Bradley, M. V. Izlar, M. D. Mayes, W. J. McLeod.

SUMTER—E. J. Reardon, Secretary.

BISHOPVILLE—Dr. R. McLeod, R. E. Eames, W. L. Parrott, H. W. Parker, O. C. Scarborough.

UNION COUNTY.

UNION—A. W. Greene, W. T. Thompson, W. M. Meadow, H. M. Grimball, Dr.T. Munro.

CARLISLE—J. G. Rice, M. R. Jeter, W. H. Gist, Dr. J. T. Hancock, M. O. Ward.

JONESVILLE—Dr. W. O. Southard, Dr. K. M. Littlejohn, Dr. H. L. Harris, F. P. O. Shields, J. F. Ahnon.

KELTON—L. J. Wood.

WILLIAMSBURG COUNTY.

SCRANTON—W. J. Sturgion, W. J. Willoughby, J. M. Kirby.
CLOVER—Dr. E. W. Pressly, Chairman; J. R. Barron, Secretary; W. E. Norton.
LAKE CITY—Dr. Thad B. Hinnant, John J. Morris, H. H. Singletary, John A. Green, John L. Stuckey, W. E. Severance, Secretary.

YORK COUNTY.

FORT MILL—Dr. T. S. Kirkpatrick, J. M. Spratt, O. W. Potts, L. J. Massey, B. D. Spriggs.
YORKVILLE—Dr. W. M. Love, A. W. Gladden, J. F. Ashe.

MINUTES OF FIRST QUARTERLY MEETING OF EXECUTIVE COMMITTEE STATE BOARD OF HEALTH.

Harris Lithia Springs, April 12, 1898.

The first quarterly meeting of the Executive Committee of the State Board of Health was held at Harris Lithia Springs, April 12, 1898. The following members were present:

A. A. Moore, M. D. . . . . Camden, S. C.
W. H. Nardin, M. D. . . . . Anderson, S. C
Charles M. Rees, M. D. . . . . Charleston, S. C.
Hon. J. P. Derham, Comp. Gen. . . . . Columbia, S. C.
James Evans, M. D. . . . . Florence, S. C.

The meeting was called to order by the Secretary, Dr. James Evans, who announced the death of Dr. C. R. Taber, of Fort Motte, who was elected Chairman of the Board at its last meeting in October, 1897, at Columbia, and in consequence of this sad and untimely death the first business in order would be the election of a Chairman.

On motion of Dr. A. A. Moore, of Camden, Dr. W. H. Nardin, of Anderson, was called to the chair to act as Chairman. The acting Chairman called attention to the long and faithful services of Dr. T. Grange Simons to the cause of public health and sanitary reform in South Carolina, and that it was eminently fit and proper, in recognition of these services, for this Board to call him to preside over their deliberations as permanent Chairman.

The motion was seconded, and Dr. T. Grange Simons was unanimously elected Chairman of the Executive Committee of the South Carolina Board of Health.

Dr. Charles M. Rees nominated Dr. A. A. Moore, of Camden, as Vice Chairman. Dr. A. A. Moore was unanimously elected Vice Chairman.

Dr. James Evans, of Florence, was also nominated for Secretary and unanimously elected to that office.

Dr. James Evans moved that the appointment of standing committees in the absence of the Chairman-elect, Dr. T. Grange Simons, be deferred, in order that the selection be made by him.

Dr. Nardin moved that the reports of the chairmen of the various committees be informally passed over for the present.

The communication of Dr. Pelletier in regard to arrearages due to the treasurer of the National Conference of the State and Provincial Boards of Health was read, and, on motion of Dr. Charles M. Rees, the dues were ordered to be paid.

A letter was read from the Governor of Michigan, conveying a copy of the joint resolutions of the Legislature of Michigan, announcing the approaching celebration of the quarter centennial of the establishment of the State Board of Health of Michigan, and extending a cordial invitation for the members of the South Carolina Board of Health to be present on that occasion. The Secretary was directed to accept the invitation on the part of the South Carolina Board of Health.

The Secretary called attention to the epidemic of smallpox at present prevailing in different parts of the State, and the difficulties and delay encountered in its proper management in consequence of the illness and death of the Chairman, Dr. Taber. He also gave a detailed account of the epidemic as it occurred in various localities, and the means which had been adopted for its proper control. The Secretary was directed to make a full report of the epidemic, to be read at the next meeting of the Board.

Dr. Nardin was selected to write a memorial notice of Dr. Taber, and Dr. Moore one on Dr. Bratton, the two former Chairmen of this Board.

On motion, the Board adjourned.

JAMES EVANS, M. D.,
Secretary State Board of Health.

MINUTES OF SECOND QUARTERLY MEETING EXECUTIVE COMMITTEE STATE BOARD OF HEALTH.

Columbia, S. C., December 28, 1898.

The second quarterly meeting of the Executive Committee of the State Board of Health was held in Columbia, the 28th day of December, 1898. The following members were present, viz:

T. Grange Simons, M. D., Chairman, Charleston, S. C.
A. A. Moore, M. D. . . . . Camden, S. C.
Charles M. Rees, M. D. . . . . Charleston, S. C.
Rob't. Wilson, Jr., M. D. . . . . Charleston, S. C.
W. H. Nardin, M. D. . . . . Anderson, S. C.
James Evans, M. D., Secretary. . . . . Florence, S. C.

The Chairman, Dr. T. Grange Simons, called the meeting to order, and in a few brief and felicitous remarks thanked the committee for calling him to preside over their future deliberations, and, trusting to their forbearance and kindness, he hoped to be able to perform the duties of the position with some degree of satisfaction to them.

The minutes of the last meeting, held at Harris Lithia Springs, on the 12th April, 1898, were read and approved.

The Chairman, Dr. T. Grange Simons, then read his annual report, which contained many valuable suggestions for the future action of the Board, and also in regard to the advisability of obtaining additional legislation to enlarge the powers of the Board and enable it to do more efficient work in the cause of sanitary reform in the State. Among the recommendations was the revision of the code of by-laws, the one especially referring to the time and place of the regular quarterly meetings of the Board. It was likewise suggested that the chairmen of the different standing committees have a meeting and determine the precise duties and limitations of their respective committees. Attention was also called to the Act introduced and passed through the Legislature, through the influence of Senator Verdier, of Beaufort, which rendered the local Board of Health independent of the control of the State Board of Health, but was also in conflict with the United States laws on quarantine. The damage by storm and flood to the quarantine stations of Port Royal and St. Helena Sound were of a character to require immediate repairs, and that the sum of $400 would be necessary..

Dr. J. Wm. Folk, Quarantine Officer at Georgetown, in his report called attention to the claim of Mr. Manigault to a part of the land

on which the present buildings of the quarantine station are situated. The matter was referred to the Attorney General for his opinion and action.

Dr. Rees referred to the necessity of the State Board of Health having at their constant command the services of a bacteriologist, in every day sanitary work, and that the Legislature be asked for a sufficient appropriation for the Board of Health to employ a competent bacteriologist to perform the work for them in this particular line, when necessary.

The report of the chairman of the committee on sanitary code, Dr. W. H. Nardin, was read and referred to the committee on publication. The report of Dr. James Evans on epidemic diseases, included an account of smallpox, as it prevailed in different sections of the State, and the difficulties incurred by the State Board of Health in suppressing the disease.

Dr. Rees, chairman of committee on quarantine, read his report and gave an account of the operation of quarantine laws at the various seaports in the State. He also recommended that the salaries of quarantine officers at Charleston and Georgetown be continued, and the Legislature be asked for the same appropriation for their maintenance.

A report on Public Schools and Their Sanitation was read by Dr. Rob't. Wilson, Jr., and referred for publication.

Dr. A. A. Moore read his report on Penal and Charitable Institutions, and spoke in high praise of the management of the Insane Asylum and Penitentiary.

The Board, after paying their respects to His Excellency Governor W. H. Ellerbe, adjourned *sine die.*

JAMES EVANS, Secretary.

RECEIPTS AND EXPENDITURES OF THE STATE BOARD OF HEALTH FOR THE FISCAL YEAR 1898.

Dr. James Evans in account with the State Board of Health:

1898.	DR.	Amount.
April 12	To amount from Comptroller General	$375 00
Oct. 28	To amount from Comptroller General	303 00
Dec. 28	To amount from Comptroller General	300 00
		$978 00
	CR.	
January 1	By balance brought down	
14	amount paid expenses to Columbia	28 40
31	amount paid secretary for salary	41 66⅔
Feb. 2	amount paid for postage for circulars	2 40
28	amount paid secretary for salary	41 66⅔
March 15	amount paid postoffice box	86
22	amount paid postage for reports and circulars	9 66
31	amount paid secretary for salary	41 66⅔
April 5	To amount paid postage for reports and correspondence	14 29
12	amount paid postage for reports	1 23
12	amount paid A. A. Moore, meeting at Harris Lithia Springs	44 00
12	amount paid J. P. Derham, meeting at Harris Lithia Springs	31 60
12	amount paid C. M. Rees, meeting Harris Lithia Springs	57 60
12	amount paid W. H. Nardin, meeting at Harris Lithia Spring	32 20
12	amount paid Jas. Evans, meeting at Harris Lithia Springs	56 00
30	amount paid secretary for salary	41 66⅔
May 25	amount paid postage for circulars	2 40
31	amount paid secretary for salary	41 66⅔
June 22	amount paid postage for circulars	2 40
23	amount paid Darr & Brunson for printing	25 00
15	amount paid postoffice box	75
30	amount paid secretary for salary	41 66⅔
July 9	amount paid National Conference of Boards of Health	10 20
12	amount paid postage and rent of postoffice box	55
20	amount paid postage	3 00
31	amount paid secretary for salary	41 66⅔
August 25	amount paid postage	2 66
31	amount paid secretary for salary	41 66⅔
Sept. 30	amount paid secretary for salary	41 66⅔
Oct. 25	amount paid postage and postoffice box	2 75
31	amount paid secretary for salary	41 66⅔
Nov. 15	amount paid printing letter heads, etc	15 00
30	amount paid secretary for salary	41 66⅔
Dec. 13	amount paid postage for circulars	2 95
24	amount paid postage	60
24	amount paid Brunson for printing	21 00
28	amount paid part pay't T. Grange Simons, meeting in Columbia	18 33
28	amount paid part pay't Jas. Evans, meeting in Columbia	18 33
28	amount paid part pay't A. A. Moore, meeting in Columbia	18 33
28	amount paid part pay't W. H. Nardin, meeting in Columbia	18 33
28	amount paid part pay't C. M. Rees, meeting in Columbia	18 33
28	amount paid part pay't Robt. Wilson, meeting in Columbia	18 33
31	amount paid secretary for salary	41 66⅔
		$977 48

LIST OF EXCHANGES.

Twelfth Annual Report of the State Board of Health of Pennsylvania, 17 volumes.
Nineteenth Annual Report of the State Board of Health of Connecticut, 4 volumes.
Thirteenth Annual Report of the State Board of Health of New Hampshire, 3 volumes.
Eleventh Annual Report of the State Board of Health of Kansas, 2 volumes.
Second Annual Report of the Board of Health of the Province of Quebec, 2 volumes.
Eighteenth Annual Report of the State Board of Health of Illinois.
Fred L. Hopkinson, 716 Broad street, Newark.
Sixteenth Annual Report of the State Board of Health of New York.
Tenth Annual Report of the State Board of Health of Kansas.
Twentieth Annual Report of the State Board of Health of New Jersey.
Fourth and Fifth Annual Reports of the State Board of Health of Washington.
Annual Report of the State Board of Health of California.
Annual Report of the State Board of Health of Indiana, 2 volumes.
Annual Report of the State Board of Health of Massachusetts, 2 volumes.
Biennial Report of the State Board of Health of West Virginia.
Biennial Report of the State Board of Health of Wisconsin.
Report of the United States Department of Agriculture.
Report of the Board of Health of the Province of Ontario.
Report of the Board of Health of the District of Columbia.
Report of the Board of Health of Mexico, 1896 and 1897.
Report of the Board of Health of Santiago de Cuba.
Sixteenth Annual Report of the Maps of the Board of Trustees of New York.
Annual Report of Supervising Surgeon General of Marine Hospital Service of the United States, 2 volumes.
Tenth Report of the Proceedings of the National Conference of the State Boards of Health of the United States, 17 volumes.
Report of the Health Officers of Michigan.
Report of the Stamford Typhoid Fever Epidemic.
Constitution and Code of Ethics of South Carolina Medical Association.
Report of the University of Illinois.
Nineteenth Annual Report of the Health Commissioners of St. Louis.
Weekly Abstracts of Sanitary Reports, Volumes 9 and 10.
Transactions of the Pan-American Medical Congress, Volumes 1 and 2.
Report of the Board of Health of Santiago de Chili.
Sonderavdrnch ans: Arbirten ans dem Karsirlichen Gesund Leitsamte.
Report of the Board of Health of the city of New York.
Report of the Board of Health of the city of Chicago.
Report of the Board of Health of the city of Denver, Colorado.
Memoria de los Srabajos Ejecutados yor el Consejo Superior de Salubridad de Mexico. Janns, 2 volumes.
Boletin de Gonsejo Salubridad de Mexico Momero Especial.
Index Catalogues of the Library of the Surgeon General, second series.
Annual Report of the State Board of Health of Maine.
Annual Report of the State Board of Health of Rhode Island.
Annual Report of the State Board of Health of Delaware.
Annual Report of the State Board of Health of Ohio.
New York Academy of Medicine, John S. Brownne.
Bulletin of Board of Health of Virginia.
W. I. Fletcher, Amherst College Library, Amherst, Mass.
H. C. Nash, Leland Stanford, Jr., University, Palo Alto, California.

REPORT OF COMMITTEE ON STATE PENAL AND CHARITABLE INSTITUTIONS.

To the Executive Committee of the State Board of Health:

In our usual annual tour of examination of these institutions, we reversed our customary order and first visited the Institution for the Deaf and Blind. We found the efficient and energetic Superintendent at his post, busily engaged in conducting its exercises, for the term of instruction had already begun.

After a survey of the building and premises, we found that all sanitary precautions in reference to ventilation, heating, sewerage, etc., were duly observed.

The electric light plant which was placed in position last year, is giving entire satisfaction, and is being extended to the bullding for colored pupils.

Physical culture and exercise still receive a proper share of attention. Besides walking and other out-door exercise, the pupils are trained and amused in a fairly well equipped gymnasium, to which fencing foils and musical dumb-bells have been added.

The number of white pupils present October 25th, 1898, were:

Deaf males	55
Deaf females	45
Blind males	26
Blind females	22
Number of colored pupils present	35

There are eight teachers of the deaf and four teachers of the blind.

As the present capacity of the building is nearly exhausted, the number of pupils cannot be materially increased in the future without overcrowding. Hence it will probably become necessary at an early day to provide additional accommodation for the admission of future applicants.

There is also an absolute necessity for a suitable building for the department of colored pupils. We sincerely trust that our General Assembly will speedily heed these urgent demands of this worthy institution.

It still maintains its exceptionally fine health record, there having been no cases of serious sickness during the year, and not a death.

PENITENTIARY.

When we arrived at this institution, we much regretted to find that the genial physician, Dr. Pope, was absent, having gone off for

a much needed rest. Dr. Lester, however, who was serving in his place, was very accommodating and courteous, showing us through the prison yard, buildings and the hospital.

There were no changes whatever to note. We regret to observe that there is still no improvement in the sleeping quarters of the prisoners, but they are allowed to remain in the same unhealthy condition as formerly. We would therefore again urgently call attention to the judicious recommendation of Dr. Pope on this important matter. We earnestly hope that an active interest in it will be awakened by the dictates of humanity, and that some legislative action will be taken at an early day looking to its remedy.

Your committee have hoped that something might be done in the way of prison reform; but so far the prison authorities have been able to accomplish nothing in that direction further than the separation, as much as possible, of the younger from the older and more hardened criminals. Perhaps, however, the worthy and commendable efforts which active philanthropists are now making to establish a State reformatory, if successful, will fulfill this much desired object.

As usual, we were pleased to find the hospital floors, ceiling and walls as neat and clean as possible. It was occupied by a few patients suffering from diverse ailments. During the past year very much the same classes of diseases have prevailed as heretofore; and it is to be much regretted that the high death rate of tuberculosis, which is the worst scourge of the prison, has not diminished, but still remains at about 65 per cent. Let it be remembered, however, that this excessive fatality is not only inherent in the disease itself, but is also much aggravated by any unfavorable conditions, such as necessarily pertain to prison life.

HOSPITAL FOR THE INSANE.

The State is certainly to be congratulated on this splendid charity. With its large, commodious and handsome buildings, and its extensive and beautiful grounds, it presents a very imposing appearance.

In addition to this, and of much importance, the purchase two years ago of the adjacent lands affords ample space now for the outdoor exercise of the convalescent patients.

By far the most noteworthy addition to this institution since our last annual visit is the completion and occupation of the new quarters for the colored insane. In our last report we endeavored to give some description of this structure, and will only remark here that, as it is a five-story building, it is thought it will be fully adequate to

meet all present demands upon it for the accommodation of patients who may be sent here.

For two or three years past the serious dangers of defective plumbing have been dwelt upon, and as a result of these repeated warnings your committee are delighted to report that a competent and experienced plumber has been employed, who is constantly inspecting and making all necessary repairs in the plumbing.

On again inquiring in reference to the separation of the tuberculous from the other patients, the Superintendent informed us that no appropriation could at present be obtained to build separate wards or a separate structure for this class of patients. This is to be much regretted, as the communicability of the disease is now universally admitted; but we can only hope for better results in the future.

In allusion to the water supply, he remarked that one or two of the wells on the premises were in too close proximity to the sewer pipes, and that he proposed to have others sunk in safer localities.

The ventilation, lighting, heating, sewerage, etc., are carefully watched and kept in proper condition.

The commissary is abundantly supplied with provisions, and the cuisine is all that could be desired.

The energetic Superintendent is ever at his post of duty, not only carefully guarding the mental and physical well-being of his patients, but also closely watching the business details of this large hospital. It is indeed no small task, but, on the contrary, must be a fearful strain on energy and patience, on mind and body. It is, however, a noble and benevolent work, and is in good and faithful hands.

Respectfully submitted.

A. A. Moore, M. D.,
Chairman.

SANITARY CONDITION OF CLEMSON COLLEGE.

During 1897 an epidemic of fever occurred at Clemson College, which finally resulted in the premature closing of the exercises of the institution and the return of the students to their homes in different parts of the State. The State Board of Health were directed by the Governor to visit Clemson, to investigate and determine the nature of the disease prevailing among the students, and to report in regard to the general sanitary condition of the buildings and grounds. This report of the State Board of Health was not in accord with the views of the trustees of Clemson College, and, at their request, Supervising Surgeon General Walter Wyman, U. S. M. H. S., was invited to send

an expert to visit the institution and ascertain the character of the prevailing affection, the purity of the water supply, and its sanitary condition. The following is the report on Clemson College of this sanitary expert, Dr. J. J. Kingman, U. S. M. H. S., and it will be seen, on reading it, that his conclusions in regard to the nature of the disease among the students and the sanitary condition of the institution were substantially the same as that of the State Board of Health:

Marine Hospital Service, Hygienic Laboratory,
Washington, D. C., April 12, 1898.

The Supervising Surgeon General, United States Marine Hospital Service.

Sir: In accordance with your instructions of January 2d last, I visited Clemson College, S. C., for the purpose of making a sanitary inspection of said institution, and more particularly to inquire into the cause of an epidemic sickness which had prevailed during the summer months of the previous year. The delay in rendering this report was due to three things; the length of time required to complete the bacteriological examination of samples of water, on account of my official duties, and, lastly, the non-receipt of plans of the barrack building, which were received only a week or so ago. These plans were called for on my return to Washington (January 6th), and they were essential for a proper consideration of the subject of ventilating the barracks.

When at Clemson College I was aided in every way possible by the President and members of the faculty, and also by Dr. James Evans, Secretary of the South Carolina Board of Health.

For the purpose of this report it is hardly necessary to describe in detail the topography of the college grounds or the buildings, as this has already been made a matter of record. I shall therefore confine myself to the subject of the sanitary survey, and will consider the following subjects seriatim:

1st. Water supply.
2d. Sewage and garbage disposal.
3d. Nature of the epidemic sickness.
4th. Ventilation of barracks.
5th. Recommendations.

WATER SUPPLY (DWELLINGS.)

The water supply for the residences of the faculty and assistants is derived from wells. These are from 50 to 90 feet in depth, and

are as a rule located in close proximity to the houses. The quantity of water furnished is adequate. The geological formation of the earth appears to be of feruginous clay with an understratum of conglomerate. This lower furnishes the water. I am informed that the clay is impervious to water, and had been frequently tested on this point. The chemical examination of the water from these sources shows it to contain but little inorganic or organic matter, as will be best seen in the accompanying table. This subject will be considered later on in connection with the bacteriological examination.

The water supply for the houses of laborers is derived from several surface springs located in the rear of these buildings. These springs are to all appearances nothing more or less than surface drains, and are not in any way protected from soil contamination. So far as I know, the water from these sources has not been the known cause of disease, but their exposed condition and unsanitary surroundings would invite trouble if it were possible.

The stockade derives its water supply from the main pumping station, and perhaps, springs situated in the rear of the building. This stockade is located in the ravine, just a short distance above the houses of the laborers.

The hospital is supplied for drinking purposes from a well located in the yard about forty feet from the building.

The water closets, kitchen and dispensary are supplied from the main pumping station.

The college, with barracks, and agricultural experiment station are supplied with drinking water from the "main spring." This spring is located in a ravine about 400 feet in the rear of the barracks and about 30 feet below its level.

The chemical laboratory also receives a supply from this source.

In addition to the above, the college buildings, barracks, laboratories, laundry, are supplied with water from the main pumping station, which is derived from springs and a pond about one-half mile distant from the college buildings. The water is forced up to a stand pipe on an elevation, from whence it is distributed.

The dairy, which is located in and at the head of a ravine, is supplied from springs located near it. These springs, I am informed, perform similar duty for the old spring-house erected by John C. Calhoun. It would appear that the dairy was located at this place rather on account of sentiment than for sanitary reasons. The springs supplying the dairy are but poorly protected from surface contamination, and, judging from the character of their surroundings, it would be safe to say that they would be subject to pollution.

The pumping station furnishes the water for flushing sewers, etc., and, as said before, is derived from two sources: First, from a large spring and from a water shed of considerable area. This water shed has been dammed across so as to form a good sized pond. The water is lifted from these sources by means of a steam pump to the standpipe, from whence it is distributed to the several buildings before mentioned. The spring does not furnish a sufficient quantity, and there is need to supplement this by water from the pond. The pond water is a surface water, and is collected from a water shed of considerable area. I was unable to learn whether the whole of this shed was owned and could be controlled by the college. I am inclined to think that only a part of it is owned by the college.

BACTERIOLOGICAL EXAMINATION.

A bacteriological examination of samples taken from the spring and pond demonstrates that the spring is almost free from bacteria, the bacteria being derived from seepage, which comes from the adjacent pond. Although the pond water contained a large number of bacteria to the cubic centimeter, there were no harmful bacteria found therein. This statement must not be taken to mean that it is free from the possibility of contamination. This may happen at any time on account of the exposed position of the water shed.

The "main spring," which is situated below the barrack buildings, gives out a considerable stream of clear, cold water. There has been an attempt made to guard this spring against surface pollution by protecting it with a brick wall and providing drains to carry off the surface water. These have not been sufficient, as I noticed at the time of my visit, evidences of surface water having run over the retaining wall and drains down into the spring. A sample of water collected from this source was given a careful bacteriological examination, with the result of isolating from it intestinal bacteria (colon bacilli). There was no indication at that time of surface water entering the spring from over the top of the wall. The pollution must have been derived from seepage through the soil.

The water supply for the dairy was carefully examined, as it had been asserted that it was responsible for the epidemic sickness of last year. These springs are situated quite near the building and are quite shallow. The water is piped from each end of the building. That from the small spring is led into the butter room, and the larger into a vat or tank located in the separating room. The overflow from the small spring also empties into this vat. All the utensils

used in the process of butter and cheese making are carefully sterilized by steam or by boiling. Rigorous cleanliness is enjoined and observed. These routine practices were not so much for the purpose of excluding any chance cause of disease, but had for their object making good butter and cheese. The cream after being separated from the milk is placed in large cylindrical buckets and suspended in the cooling vat. It is frequently the case—especially when the buckets are quite full—that some of these would topple over, and the cream would become contaminated with the water. Also, in handling the buckets there was chance of contaminating cream with the water. *The water from the small spring was used exclusively for cooling the butter during its mixing and working.* This latter was a constant practice. These routine manipulations would have excited no comment except for the reason that these springs were in an exposed position and were liable to become polluted from surface washings, particularly after rains. If these springs were polluted, it can be readily seen that the cream and butter would, under ordinary circumstances, become contaminated. Samples of water were taken from these springs, and in a bacteriological analysis, the larger spring was found to be contaminated with sewage bacteria and the small spring with intestinal bacteria (colon bacilli). The contamination of the large spring could readily be accounted for from the outside, while the contamination of the small spring must have arisen from some underground source. Whether it is due to percolation through the soil from the ground just above it, or from the washings from the water shed, or from a leaky sewer, cannot be determined.

Quite a number of wells were also examined. These were from residences where there was illness during the last summer. The well at the hotel is quite near the building, and is quite poorly protected from surface contamination. A bacteriological examination of the water demonstrated the presence of both sewage and intestinal bacteria. The well at the Calhoun mansion contained sewage bacteria; so also did the one at the residence of Captain Fuller. All the others, eight in number, were not contaminated.

SEWERAGE AND GARBAGE DISPOSAL.—SEWER SYSTEM.

The college and barrack buildings, chemical laboratory, agricultural experiment station, hospital and stockade are provided with sewers. There are two lines—one from the college and barracks, which empties direct into the Seneca River, about three-quarters of a mile distant, and the other from the laboratories, agricultural experi-

ment station, hospital and stockade, which empties into the drain, one-half a mile below. This drain continues and empties into the river. The sewer pipes are constructed of ordinary earthen ware, 10 inches in diameter, and are supposed to be cemented. The barrack buildings are provided with modern water closets and sanitary plumbing. The sewers from each of the water closets and lavatories are carried back for a considerable distance, where they join into one line. The distance of the sewer from the spring is about 200 feet, and is slightly higher than the spring. Whether there is any leak from this sewer or whether it was possible for the sewage to percolate into the spring cannot be determined. I am inclined to believe that this is a remote possibility. The sewer pipe which extends from the agricultural experiment station passes down the slope into the ravine close by the dairy and within about 20 feet of the small spring. The gradient of the sewer appears to be sufficient to rapidly carry off the water. At one time, so I am informed, there was a water closet in the engine room of the dairy, which connected with this sewer line. This has been removed. Just below the dairy the main sewer is joined by one from the chemical laboratory and laundry, and a little further down it receives the sewer from the hospital and stockade. Some parts of this sewer are exposed and on examination appear to be in good condition.

There is no systematic provision made for the sewage and garbage disposal from the dwelling houses. Each of the houses is provided with a box privy system, and the night-soil is removed at certain intervals. Some of these privies are located quite near the buildings and far too close to the wells, while others are at a considerable distance. Each family makes its own arrangements for the disposal of night-soil, and the service is fairly well performed. In some places, however, this has been neglected. This is especially so with regard to those at the hotel. One of these is located about 100 feet distant from the well, and is of the latrine order. When full the closet was moved to another location. This was a serious menace to the dairy, situated about 200 yards below, because the rains could carry the night soil down the slope and into these springs.

Neither is there a systematic method of garbage disposal. Every family has to make individual arrangements for having this hauled off. This is supposed to be done at least once a week, but I am informed, that often as much as two weeks intervene.

The sources of the pollution of water supply evidently arises from the water sheds being contaminated. The grounds in the rear of the barracks—in fact, the whole slope in the vicinity of the "main

spring"—is an open common, and is not protected by a fence or police regulation. It is an easy matter to conjecture how this slope could become contaminated, and could receive the dejecta from the healthy as well as the sick—especially so if persons in the first stage of the disease are allowed to roam over this common at will. I am inclined to think that the sewer is sufficiently far away to prevent the possibility of its contaminating the spring, but I would not wish to make the statement unless substantiated by a thorough examination of the sewer. I do think, however, that there is a source of contamination which has heretofore been overlooked, and that is a surface drain at the barrack buildings. This has its origin from a spring in the side of the hill, and the water is carried away by means of a surface drain. This drain receives the surface washings from the court yard, and it is then disposed of down the hill. This may, under certain conditions, become a source of danger to the spring below.

I am inclined to believe that the dairy is more of a menace to the health of the college than any other. The drain receives the surface water from a very large area formed by the two ranges of hills on either side of the valley. Upon these hills are located the residences of the professors on one side and the hotel and another residence on the opposite. It is always possible during a heavy downpour of rain for the washings of fecal matter to be carrried down this slope into the ravine, and when the downpour is sudden and heavy a sufficient quantity of water can overflow the artificial barriers and pass into the spring. This, I am informed, has been the case two or three times during the last year. If the same conditions existed last summer or previously as at the time of my visit, it is a matter of easy conjecture to see how typhoid fever could be washed into the spring or the dairy, provided that there were any cases in the residences on this water shed.

The cause which led to an inspection of Clemson College was the epidemic sickness which occurred during the months of May, June and July, when about 80 of the students became ill, and in consequence thereof the school was temporarily closed. There was at that time, and is now, a difference of opinion as to the character of the sickness and the cause of it. Some claim it to have been typhoid fever, and others a mild form of malaria. The epidemic was not confined to the students alone. Quite a number of the families resident in the vicinity of the college were also affected. On the evening before my departure I had an extended conversation with Dr. ———, the physician to the college, and obtained from him much information concerning the nature of the epidemic. It is to be re-

gretted that no clinical records were kept of the cases treated in the hospital. The reason of this, so the doctor states, was because it was impossible to look after all who demanded his services and to keep anything like a record of the cases treated. Further, after about three weeks he himself was taken ill, and remained so for five weeks. The character of the illness was a fever of a low type, gradual in its onset, and of variable duration. There were several cases which terminated fatally after several weeks absence. These had all the appearance and clinical symptoms of typhoid fever. In 1894, 1895 and 1896, cases of typhoid fever occurred among students in the college. The majority of these were contracted away from the college, and developed soon after their arrival. Some, however, occurred at Clemson College which could not be accounted for in this way, but appear to have been contracted from a local infection, especially those cases which occurred at the hotel.

It also occurred to me that it might be well to take specimens of blood from a number of students who were ill during the last summer, for the purpose of subjecting these specimens to Widal's test. Specimens were also collected from others who were not ill at that time. It is a well recognized fact that the agglutinative reaction can often be observed in cases recovered from typhoid fever for a considerable length of time afterwards. Some authors have stated that it can be found at the end of six months, and others at the end of two years. My own experience is that it usually lasts for several months, and gradually diminishes.

LIST OF PATIENTS.

Name.	Where From.	Character of Illness.	Widal's Reaction
Creitzberg..	Charleston.....	Taken sick in June, 1897, with slight fever; worse in the afternoon.....	None.
Nixon.....	Charleston.....	Taken sick June 1st, 1897; sick for 15 days with fever and diarrhoea.....	None.
Maxwell....	Anderson.....	Sick for 5 weeks in June and July, with a slow fever; temperature 102-105° F. in afternoon.....	Positive.
Gervais.....	Lower Coast.....	Sick about the 1st of June for about 25 days with fever which came on gradually; evening temperature 104°. No diarrhoea or prominent symptoms.....	Slight.
Boykin.....	Camden.....	Sick five weeks in June and July, slow fever; temperature in afternoon 104-105° F.; in the mornings 101-102°; delirious.....	None.
Brown.....	Oconee County.....	Sick in June; taken with a chill, and was ill for 3 weeks; was worse in the mornings; pain in abdomen.....	None.
Wiggins.....	Lower Coast.....	Taken sick in the middle of June, ill for 12 days with a slow fever; no diarrhoea nor prominent symptoms.....	Reaction positive.
Moon.....	Greenville.....	Sick for 4 or 5 days in June with a fever; came on gradually; highest temperature 102°.....	None.
Johnson.....	Spartanburg County.	Had typhoid fever two years ago; was taken sick in July, and continued so for 3 weeks; no prominent symptoms.....	Reaction positive.
Henry.....	Abbeville.....	Taken sick 5th of June with slow fever; temperature same morning and evening (102°); no prominent symptoms.....	Reaction positive.
G. P. Lewis..	Clemson.....	Resident at Clemson 1 year; was sick last year in May-June for 5 weeks; slow fever...	None.
Sanders.....	Newberry County....	Had typhoid fever two years ago; sick then for 3 months; taken sick about the 1st of June with slow fever; 100°, which continued for 2 weeks.....	None.
Douthitt....	Anderson County....	Had typhoid fever in 1894; again sick at Clemson, 1896, with fever.....	None.
Forsythe....	North Carolina.....	Had a slight fever for 2 weeks in 1896; also had jaundice.....	None.
Hoop.....	Orangeburg.....	Typhoid fever in 1893; taken sick in July, 1897; had a chill, followed by fever.....	None.
Lawton.....	Hampton Connty.....	Taken sick in June with slow fever, gradually increasing; had diarrhoea; attack lasted 3 weeks; slow convalescence.....	Reaction positive.
Hill.....	Abbeville County.....	Taken sick about June 1st with pain in bowels and left side, slow fever coming on gradually; ill for 2 weeks.....	Reaction positive.
Blaken.....	Lancaster.....	Not sick in 1897, nor has had typhoid fever...	None.
Stephens....	Greenwood County...	Has had 3 attacks of appendicitis—one last June.....	None.
McCreary...	Anderson County.....	Not sick in 1897.....	None.
Roddy.....	York County.....	Not sick in 1897.....	None.

It will be seen from the above table that not all the cases sick last summer responded to the test, while on the other hand six cases gave a typical reaction, and the specimens of blood from those not sick last summer nor having had typhoid fever at a previous time did not respond to the reaction. Taking into consideration the character of the illness and the time when it occurred, and the positive reaction obtained in a limited number of cases, it is conclusive to my mind that typhoid fever existed at the college during the time when the sickness was epidemic. The infection for the typhoid fever cases in all probability arose from either the contamination of the water of the main spring, or, what is most likely, the contamination of the dairy products by using polluted water in their manufacture. This latter appears to be most reasonable. The majority of the cases of illness, especially those of long duration, occurring among the students would point to some infectious material being introduced into the college barracks or into the food used. I am informed that the butter and dairy products are used to a large extent by the students This, however, will not explain the cause of the illness among the residents. These did not obtain their milk or butter from the dairy. It has been claimed by some that the disease which prevailed last summer was malaria. In the spring—in May, I believe—the Seneca River became so swollen that it broke over the levee which protected the large bottom field, which was covered to a depth of four or five feet. On the waters receding, several stagnant pools of water remained, and it became necessary to employ a force of laborers to drain these ponds and to rebuild the levee. This left about 100 acres of alluvial soil under the best possible conditions for the development of malaria. It would be natural to suppose that those who were directly exposed to the alleged malarial infection would be the first to succumb or furnish the largest number of cases, yet my inquiry did not confirm this, as the laborers and others engaged in draining and repairing the levee were not any more affected than the students, who were not brought into contact therewith. Another fact is that malaria is not endemic in this part of the State, and it would be exceptional for such an epidemic to occur in this locality. The rains which caused the river to overflow the alluvial lands were also the cause of surface washings. This would account for the contamination of the water supply for the dairy and barracks, and in all probability was the cause of washing infected material from the surface of the grounds and from the open privies into the drains where these springs are located. Another important feature is the absence of the paroxysms which accompany malaria. It has been my experience and that of

others in epidemics of malaria, that there is a large number of cases where there are well defined paroxysms. In but one or two instances did this occur among the students questioned as to the cause of their sickness, and these had been suffering from malaria a short time before.

Taking all the facts into consideration, I believe the following conclusions are justified: First, that the disease occurring at the college was in all probability typhoid fever. Second, that cases of typhoid fever had been imported from other places, and in instances spread to others, thus establishing for the time being a local infection. Third, the water supply of the barracks and dairy shows contamination with fecal bacteria, derived from either the ground washings or leaky sewers. Fourth, that the rains of April and May caused infection to be washed into the water supply, especially that of the dairy, thus infecting the milk and milk products.

In making recommendations looking to the improvement of the sanitary condition of Clemson College, the water supply must be first considered. There should be an adequate supply of pure water for drinking and bathing purposes. It is a question whether the present supply for drinking purposes will suffice, even if it can be protected against pollution. While there is a large chance of the sewer from the barracks buildings becoming a source of danger to the spring, yet a sewer located as this one is—above the level of the spring, hidden away under ground—is a danger to the springs and wells near by. The present water supply for purposes other than drinking may answer, provided two things are done: First, control the water shed and small springs which feed the pond. If this cannot be done, it should be abandoned. The best way to solve the question appears to be to supply Clemson College with water from artesian wells. One artesian well would in all probability supply sufficient for all purposes.

The sewage system should be extended not only to the college buildings, but to all the residences as well. This could easily be accomplished by extending the present system in the following manner. One line of sewers to connect with the hotel and residences on the one side of the slope, and be carried down and be joined to the one at the agricultural experiment station; a second line to be extended from the residences to the hospital, and there connected with the hospital sewer; a third line to be extended from the residences in the vicinity of the Calhoun mansion and connected with the sewer in the ravine below the dairy. This would provide a system of sewage with little expense, and it is believed would be ample to meet all

the requirements. The present standpipe could be utilized for distributing the water from the artesian well to the several buildings.

These recommendations, if carried out, would entail considerable expense, and not only that, but considerable time before it could be put into operation. In the meantime, something should be done with regard to the disposal of night-soil from the residences. While I believe that a box system for privies is not safe, especially when located near wells, it would be a great improvement over the present conditions. A dry earth system could be put in operation without much expense, and should be done at once. If the dairy is to be supplied with pure water its location would not be an objection, but if it depends upon its present supply it should be removed.

The topography of the grounds is well suited for the location of college buildings, but there could have been many improvements in selecting sites for them, especially for the college building and barracks. Why this site was selected will perhaps never be explained. There is no reason why the barracks should have been built in the side of a hill, when there are so many other eligible sites at hand. The grounds on which the present hotel is situated would have been much better adapted for this purpose. As it now stands, a part of the lower floor of the barracks is some ten or fifteen feet below the floor line of the college building, and built upon the ground, and the subsoil saturated with water. Already some parts of the lower floor show the effects of the dampness. Unless the foundations and space under the floors are properly protected from subsoil water, this floor will always be in an unsanitary condition.

With regard to the heating and lighting of the barracks, as a whole, both are amply sufficient.

The ventilation, however, of the dormatories is believed to be inadequate. The present system allows the air to enter as best it may through the two windows and diffuse itself in the room, and its only exit is by means of a door and a small transom above it. When the door is closed there can be but little circulation of air throughout the room unless the windows be opened. The defects of this system of ventilation have been remedied somewhat by placing strips on the lower sash of the windows, so that there is always a space of one or two inches between the upper and lower sashes. There is what is known as a dead air space between the top of the windows and door and the ceiling. There are no provisions made, however, for the change of this stratum of air. The original design for ventilating the building contemplated that the air should come in through the windows and pass through the transom and into the halls, and there

diffuse itself the best it may to the top of the building. The defects in the present system can be remedied by the adoption of either of the two plans following: First, the downward system of ventilation, which would require the air to be drawn in from the top of the buildings, and taken out of the rooms at the floor level. This plan, if adopted, would mean an enormous expense, far too great to be considered, as this system of ventilation would practically mean the rebuilding of the whole structure. The second plan is one which can be adopted with but few changes in the rooms, and with but little expense. In this connection I would say that I have thoroughly canvassed the subject with Mr. Henry Adams, chief engineer of the Supervising Architect's Office, who also recommends the following changes: First, that the radiators be so arranged as to stand parallel to the wall, being removed a few inches therefrom. Just behind the radiator there should be provided a ventilator so arranged as to allow the air to pass into the room and over the steam before becoming diffused. Now, to carry off the incoming air, a ventilator of the following dimensions should be provided for each room: 8x8 inch pipe for the lower rooms, an 8x10 inch pipe for the second story, and an 8x12 inch pipe for the third story. These pipes should be placed in the corner of the room diagonally opposite the radiator, and extend from the floor of each story to the space under the roof. These ventilating pipes should be provided with registers of the following dimensions: 8x12 inches for the lower floor, 10x12 inches for the second floor, and 10x16 inches for the third floor. The air from these ventilating pipes would pass into the space above the roof, from whence it could be taken out by means of three large open ventilators placed in the comb of the roof. By the adoption of this system it will readily be seen that the air can be taken in from the outside, and properly warmed and distributed without causing a draught. It will also do away with the danger of the dead air spaces above the windows and door. During the summer months it will also aid in thoroughly ventilating the rooms by reason of the fact that the warm air under the roof will create a draught which will act as a suction to that in the rooms, and thereby insure a constant current passing through these, which can be controlled at will.

If these recommendations regarding the water supply, the sewage, garbage disposal and ventilation be carried out, it is believed that Clemson College will be in a good sanitary condition.

Respectfuly submitted.

J. J. KINYOUN,
Passed Assistant Surgeon, M. H. S. Director.

Smallpox in the State.

REPORT OF COMMITTEE ON EPIDEMIC AND ENDEMIC DISEASES—*Dr. James Evans, Chairman.*

The diseases which usually prevail as epidemics, and attended by a high rate of mortality, assumed a mild form during the years 1897 and 1898. During the former year, yellow fever, which had hitherto been considered the great scourge of the South Atlantic and Gulf States in consequence of its high death rate, broke out at Ocean Springs, Miss., where eighty-five cases occurred before a single death took place, the disease assuming such a mild type and changed aspect, that physicians who had been familiar with it for years failed for some time to recognize it, and thereby to take the necessary precautions in time to prevent its spread to other localities. It required a post mortem examination to reveal the true nature of the disease; in the meantime it spread to various points in this State, to Louisiana and other States in the southwest, and gave rise to a widespread epidemic. The history of yellow fever in this country does not present a similar instance of the disease appearing in an epidemic in a type so singularly mild that the mortality did not exceed one or two per cent. It was also during the year 1897 that smallpox made its appearance in the mining region of Alabama among a population where the most favorable conditions existed for its rapid spread in every direction. Happily the disease was in one respect like the prevailing type of yellow fever, mild in character and attended by a lower rate of mortality than ever before known in the history of the disease. This fact, however, largely contributed to its more rapid infusion among the people, as the initiatory fever prior to the eruption was slight, and seldom being followed later by a secondary fever, it became exceedingly difficult to confine the afflicted to their houses, and prevent them from walking about the streets of the towns and country roads, and thus communicating it to every one they met. It had been many years since smallpox had appeared in epidemic form, and only a few of the older physicians had any clinical knowledge of the disease. This fact, and the slight fever and light mortality attending the present epidemic of smallpox, was so little in consonance with the preconceived notions of the dreadful fatality of the disease entertained by a

large number of physicians, who had no personal experience in its treatment, that the expression of their opinions in conversation and writing produced a widespread impression among the laity that the prevailing disease was not smallpox, but a trivial affection, which was not dangerous to life, nor need cause any apprehension of disfiguration as one of its sequels. While these views were honestly entertained by many persons, a large number from commercial reasons were unwilling to admit the presence of smallpox in their midst, and opposed all measures for the prevention of the further spread of the contagion by the health officer.

The first case of smallpox in this State occurred at Rock Hill, in the person of a boy who had accompanied his father to Atlanta, and to whom the disease was communicated by the elevator boy in the Kimball House. A few days after his return the disease made its appearance, and the city authorities, fully appreciating the gravity of the presence of such affection in this center of education and manufactures, at once isolated the case and the family in which it occurred, enforced general vaccination, and by these prompt measures prevented the occurrence of another case. Only a short time elapsed before the disease made its apparance in Greenville, in the person of a negro who passed through Columbia, but it was not ascertained where he contracted the disease. Immediately following this man were four others, who on their arrival were in the eruptive stage of the disease. There were thirty-seven cases in this city—adults thirty-three, children four, among them six whites, the remainder being negroes. The most of these occurred at the residence of a man named Stenhouse. About this time James E. Montague, a bricklayer, and working for Contractor Bomar of Greenville, became a boarder at Stenhouse's and remained there two weeks; on or about December 2, 1897, this man left Greenville and went to Spartanburg, and remained there until December 8, when he proceeded on his journey to Orangeburg, and stopped at the State Agricultural and Mechanical College, and occupied the room with Hicks and Mitchell. Montague was attacked on December 12, 1897. Hicks went to Fort Motte to spend the Christmas holidays at the home of John Williams, a mulatto preacher and teacher, and was attacked December 31, with chill and fever, and the eruption appeared on him three days later. On January 5, this man, covered with the eruption, with his face veiled, boarded the train and returned to the college at Orangeburg. Williams, who had never been vaccinated, refused vaccination, and subsequently had a severe attack of the disease on the 16th of December. His wife, who had been successfully vaccinated ten years pre-

viously, escaped, although in the house with him for more than a week, while the husband was with him for a day. Mitchell, Hicks' roommate, went to Sheldon, in Beaufort County, to spend his holidays, and had been at home but a few days before he was seized with a chill, high fever and an eruption making its appearance on the third day. This man was sick for three weeks or more. At his home were three or four brothers and sisters (children), who were vaccinated at once. His grandfather, quite an old negro, refused vaccination, had a severe attack and came near losing his sight, while the children were not in the least affected. In the meantime, the number of the students at the college became affected with eruptive disease, and while every one admitted that it was contagious, there was marked difference of opinion among the local physicians of Orangeburg in regard to the true nature of the disease, whether it was the harmless eruptive disease, known as vasicella or chicken pox, or genuine smallpox of a mild type. This difference of opinion in regard to a disease that was evidently contagious created a panic among the students and their friends, and likewise considerable alarm all over the State. In order to allay public anxiety and remove all opposition on the part of the people to restrictive measures absolutely necessary for their welfare and safety, the State Board of Health thought it prudent and wise to obtain the opinion of a physician who had passed through a number of epidemics of smallpox and was familiar with every phase of the disease. On a former occasion, the State Board of Health had availed themselves of the services of Dr. H. M. Stuart, of Beaufort, to take charge of an outbreak of smallpox at Hardeeville, and they congratulated themselves that they had obtained the consent of this gentleman, who had had the vast personal experience in the treatment of more than 1,500 cases of smallpox, to go to Orangeburg and determine the true nature of the eruptive fever prevailing among the students at the Agricultural and Mechanical College at that place. This he did, and after careful examination came to the conclusion that the disease was genuine smallpox. Notwithstanding the different views entertained by the local physicians in regard to the disease, the municipal and college authorities adopted the wise and prudent course of placing the institution under strict quarantine. Many of the students becoming alarmed, succeeded in eluding at night the guards stationed around the campus and building, and fleeing through the country, boarded the trains along the different railroads and returned to their homes in the different parts of the State. The disease in this way rapidly spread not only to the adjoining counties, Richland and Sumter, but to such widely sep-

arated ones as Beaufort, Darlington and Saluda. The situation was becoming more serious every day, and the threatened widespread epidemic was the cause of much alarm and anxiety in every part of the State. In a short time the disease was conveyed from Greenville to Pelham Mills, a large cotton manufactory situated a few miles from Greer's Station, on the Southern Railway, and attacked a large number of the operatives. The presence of the disease at this point was not reported to the health authorities of the State until the number of the sick increased to such an extent that it threatened to suspend the operations of the mill. A local Board of Health was immediately appointed, consisting of five members, including among its members some gentlemen connected with the mills and the two leading physicians of the community, and ample authority was given them to adopt and enforce the most energetic measures for the control and suppression of the disease. As in Orangeburg, the public at Pelham and vicinity entertained widely different views in regard to the true character of the epidemic, and it became almost impossible to secure the co-operation of the people in such measures as was calculated to bring it to a speedy close. The difficulties of the situation were further enhanced by the two physicians on the local Board of Health thinking their usefulness as members at an end, declined to serve in that capacity longer, necessitating an appeal to the Governor for the authority to employ a physician and assistance from a distance to take charge of the epidemic, thus causing the loss of invaluable time at this critical juncture. Dr. Peter E. Bacot, an accomplished physician, who during the Civil War had considerable experience in the treatment of smallpox, was sent to Pelham, clothed with ample authority to adopt such measures for the control of the disease, as in his judgment were conducive to that end. Dr. Bacot, with two sanitary assistants, on their arrival at Pelham, were directed to establish a pest house for the sick, and a camp of detention for those who had been exposed but had not manifested any symptoms of the disease, and to employ guards to confine them at this place until they no longer showed any signs of disease. He was further requested to make a house to house visit at Pelham and the country around and in a radius of five miles, to take the names of every man, woman and child, to examine their arms for evidence of previous vaccination, and when necessary to vaccinate and send the sick to the pest house, and the exposed to the camp of detention when they could not be properly guarded at their homes. There were 306 cases at Pelham and four deaths. By the energetic means mentioned above, and the vaccination of about 1,500 persons, the disease

was brought under control, and in sixty days effectually stamped out.

Early in December, James E. Montague, on his way to Orangeburg, spent six days in Spartanburg, and left behind him the infection which he brought from the Stenhouses at Greenville. Afterwards some of the students at the Orangeburg College, to whom he had given the disease, came to Spartanburg, and the places at which they stopped in the latter place became additional centers of contagion. It is probable that Pelham was another source of infection; from this place the disease was probably conveyed to Beaumont Mills. As soon as the disease made its appearance in this city, one of the chief centers of education and manufactures in the State, a communication was sent to the local Board of Health, urging the adoption of the most energetic means for the arrest of the disease before it assumed the larger proportion of an epidemic. This action was imperatively demanded in the interest of the schools, colleges and varied industries of the city. The same diversity of opinion in regard to the true nature of the disease was entertained by the physicians in Spartanburg as in Orangeburg, and many of them did not hesitate to say that the disease was not smallpox, but a harmless affection which neither required quarantine nor the adoption of any harsh measures for its suppression. Many members of the City Council and superintendents of some of the mills, and even members of the Board of Health, held very much the same views of the prevailing affection, and prevented the adoption of any measures for the isolation of the sick and the establishment of an effective quarantine. The State Board of Health, entertaining the firm conviction that the prevailing disease was smallpox, and fully appreciating the difficulties to be encountered by the Secretary of the Board of Health at Spartanburg in carrying out their recommendations, advised the establishment of a pest house and a camp of detention; that sanitary inspectors should be appointed and clothed with ample authority to make a house to house visitation, send the sick to the pest house, the suspects to the detention camp, and enforce compulsory vaccination, or require those who should refuse to leave the city. Just at this time the Secretary of the State Board of Health received a telegram from Surgeon General Walter Wyman, U. S. M. H. S., that the Hon. Stanyarne Wilson, M. C., had requested him to send an expert to Spartanburg to ascertain if the disease prevailing in that city was smallpox, and if it met with the approbation of the State Board of Health, he would detail Past Assistant Surgeon C. P. Wertenbaker to visit the city for the purpose. The State Board of Health gave their consent. Dr. Wertenbaker went to the city and spent several

days in making a careful examination of those suffering with the disease at the various cotton mills in and near the city, and came to the conclusion that it was neither smallpox nor chicken pox, but was probably impetigo contagiosa. Immediately after the publication of the opinion of this expert, the City Council met and directed that the quarantine should be raised and all restrictions removed. Throughout the city free intercourse was allowed, and persons were permitted to visit their friends who were suffering with the prevailing disease. The State Board of Health, however, ordered the re-establishment of quarantine as soon as this action of the City Council of Spartanburg was reported to them. This action of the municipal authorities caused a larger number of persons to be attacked in the city and the disease spread to the country in the immediate vicinity.

There were several cases of smallpox in York County, but by timely isolation and enforcing at once vaccination, the disease did not spread and was speedily stamped out.

At Hartsville, in Darlington County, a case occurred in the person of a student from the Industrial and Mechanical College at Orangeburg, who, during the outbreak of the disease at that place, eluded the guards and went home. This man gave the disease to three others of his family. Isolation and vaccination of every one in the immediate neighborhood checked its further spread.

The disease broke out in a number of places in Saluda County, and was of a more severe type than occurred in any other locality in the State. There were twenty-four cases and two deaths. Prompt action and judicious management quickly circumscribed it within narrow limits, and it soon became extinct.

The student, Mitchell, conveyed the disease from Orangeburg to Beaufort County. The disease was confined to the house of this young man, and was prevented from spreading further by strict isolation, and vaccinating every one in the vicinity. Two other cases occurred in this man's family.

Early in April the disease was conveyed to Columbia by students from Orangeburg. In this city for some time the physicians differed in opinion in regard to the true nature of the disease, and many of the citizens taking very much the same view of it, created so much public apathy and indifference that the disease made considerable headway before the gravity of the situation was fully realized and appreciated. At this time Surgeon General Walter Wyman, U. S. M. H. S., sent a telegram to the State Board of Health that Senator B. R. Tillman had requested him to send an expert to Columbia to ascertain if the disease prevailing there was really smallpox, which

he would do if there was no objection on the part of the State Board of Health. Consent was cheerfully given, and Dr. C. P. Wertenbaker, U. S. M. H. S., who had some two months previously been sent to Spartanburg on a similar errand, was detailed to make the examination. This gentleman, after visiting the pest house and a number of cases in different localities in the city, pronounced the disease smallpox of a mild type.

The disease which prevailed in Spartanburg was introduced from Greenville into that city by James E. Montague, who afterwards went to Orangeburg and communicated it to the students in the Agricultural and Mechanical College at that place; and in the panic which ensued on the first appearance of the affection in this institution, many of the students fled to their homes and conveyed the disease to Columbia and Sumter. In the face of these indisputable facts, Past Assistant Surgeon C. P. Wertenbaker, U. S. M. H. S., calls the disease impetigo contagiosa in Spartanburg and a mild type of smallpox in Columbia and Sumter.

The different views of the prevailing disease entertained by the physicians of Columbia allayed the apprehensions of the public, and for a long time no active and aggressive measures were taken for its suppression. In consequence of this indifference and delay, the epidemic assumed considerable dimensions, and required large expenditures on the part of the city to control it. The disease spread beyond the limits of the city in the rural districts, and entailed a large expense on the county before it was finally eradicated. About this time, also, a few cases began to appear in the town of Sumter, the beginning of a serious outbreak of a rather severer form of the disease than had invaded most other places in the State. Subsequently the disease spread beyond the limits of the town to the country in the immediate vicinity, and as it was in a thickly populated section, it became difficult to manage and suppress. Outside the limits of incorporated towns and cities the epidemic frequently attains large proportions before it is brought to the notice of the State health authorities, and it becomes, in consequence, more difficult to manage, and requires a larger expenditure of money to control it. Only a few days ago (15th December), notice was given of the existence of smallpox in the eastern section of this county, and on investigation it was found that the disease was prevailing over quite an extensive area on both sides of Black River. Further inquiry showed the presence of the disease in this locality nearly two months ago.

Prompt action and the most energetic and aggressive measures are required to control epidemics of any disease, but more especially those which are usually attended by a high death rate. Vacillation and indecision on the part of the health authorities is a fatal and criminal mistake in their management, as it involves loss of life and large expenditures of money. The powers of the State Board of Health should be enlarged, and not merely advisory as they are at present, and they should be given control of epidemics whenever they occur in the State. Their action would be less influenced by local interests and prejudices than the local Board of Health. The Act of 1894 establishing local Boards of Health in incorporated towns and villages should be extended to every township, and these township boards as well as those in the incorporated cities and towns should be required to give notice to the State Board of Health of the presence of any contagious or infectious diseases in their jurisdiction, and a penalty attached for neglect to perform this duty. If this was law, the State Board of Health being apprised of the presence of any epidemic, could take immediate steps for its suppression, and thus save life at less expense to the people of the State than under the present law.

During the present epidemic of smallpox, the State Board of Health took charge in only those localities in which there were no local Boards of Health. As their powers are merely advisory, in order to be clothed with some authority to do this work, they had to obtain from the Governor commissions for Sanitary Inspectors. The epidemic in incorporated towns was under the management of their respective local Boards of Health, and the Act of 1894 conferred ample power on them, as their rules and regulations had the force of a town ordinance when approved by the Mayor and Council.

SMALLPOX IN ORANGEBURG.

Orangeburg, S. C., January 24, 1898.

To Dr. James Evans, Secretary of the State Board of Health, Florence, S. C.

Dear Doctor: On the night of the 22d inst., I received the following telegram:

"Dr. Evans says come, see supposed cases of smallpox here tonight. (Signed) W. W. Wolfe, M. D."

I received the dispatch too late to go there on Saturday night, but went Sunday morning. With Dr. Taber, Jr., and with Dr. Wolfe, I saw and examined two cases. One of them was a negro girl about ten years old, suffering from a post vaccinal rash. The other is in

my judgment a case of smallpox. I so announced, and directed that the patient be isolated and rigidly quarantined.

The history of this case is as follows: John Williams, aged 50 (mulatto), preacher and teacher, resident at Fort Motte, S. C. During the holidays, Harris Hicks, a student from the State Agricultural and Mechanical College at Orangeburg, stayed with Williams and his wife. While at Williams' home, Hicks was attacked, December 31st, 1897, with chill and fever, and the eruption appeared on him three days later (January 2d, 1898). Williams, who was absent at the time, returned to his home on the 4th of January, and was with Hicks that night and until 5 P. M. of the 5th of January, at which time Hicks, with his face veiled and muffled, boarded the passenger train on the South Carolina and Georgia Railroad, and came to Orangeburg. On his arrival here he was isolated. Dr. Wolfe telegraphed the Chairman of our Board of Health to see and examine Hicks. Dr. Lowman wired Dr. Wolfe that Hicks had either a case of varioloid or an aggravated case of chicken pox. Whereupon Dr. Wolfe saw Williams and urged him to be vaccinated. He refused vaccination, believing the disease to be chicken pox. Twelve days after the exposure, viz: on the16th of January, 1898, Williams was seized with a chill, followed by high fever. Dr. Taber, Jr., saw him, and prescribed for chill and fever. The fever persisted until the 19th of the month, when a papular eruption appeared, first on the forehead and rapidly extended to the whole body. I saw him on the 23d. The majority of the papules had been by this time surmounted by umbilicated vesicles. There were others in which the process of vesiculation was just beginning. Two vesicles were noticed on the lower lip, and many were seen on the palatine arches. The eruption on the posterior pharynx was still papular. In the roof of the mouth there was a single large umbilicated vesicle, looking more like a vaccine vesicle than any thing I can think of. Williams has never been vaccinated. His wife, the only other occupant of the house, was successfully vaccinated about ten years ago. I have yet to see a vaccinated person suffer from this peculiar disease.

Drs. Taber and Wolfe are thoroughly alive to the situation, and are pressing vaccination with due diligence. I do not, therefore, apprehend a wide spread of the disease. I take the liberty of inclosing herewith some reasons and authorities which induced Dr. T. C. Doyle and myself to believe that the first cases seen here were smallpox, and which support the diagnosis in the case of Williams. All the cases so far seen have been traced directly to James E. Montague. The history of this man is as follows: Montague is a bricklayer, and

worked for Contractor Bomar at Greenville, S. C., for two weeks, for which time he boarded at Stenhouse's. On or about December 2d, 1897, he left Greenville and went to Spartanburg, and there remained until December 8th, when he came on to Orangeburg. He was attacked on the 12th of December.

Respectfully,

A. S. HYDRICK, M. D.

Reasons for believing the eruptive disease which occurred at the State Agricultural and Mechanical College at Orangeburg, S. C., December 12th, 1897, in the person of James Montague and in other negro students was smallpox, not chicken pox.

First: The age of the patients: 1. James E. Montague, age 21, Spartanburg, S. C. 2. H. C. Hicks, age 20, Newberry, S. C. 3. J. D. Douglass, age 23, St. Stephens, S. C. 4. P. M. Gary, age 30, Greenville, S. C. 5. W. T. Johnson, age 20, Newberry, S. C. 6. I. L. Howell, age 21, Berkeley, S. C. 7. H. R. Banks, age 24, Anderson, S. C. 8. W. Scott Holman, age 16, Newberry, S. C. 9. G. W. Bradley, age 16, Bradley's, S. C. 10. James Bank, Orangeburg, S. C., traced to the above cases. 11. John H. Williams, age 50, traced to the above cases.

We cite the following authorities:

Osler, Principles and Practice, 2d ed., page 69: "Varicella is an acute contagious disease of children, it is a disease of childhood. A majority of the cases occur between the second and the sixth year. It is rarely seen in adults."

Keating Ency. Dis. of Children, article Varicella, by Dr. Charles G. Jennings: "An acute specific infectious disease peculiar to infancy and childhood. Varicella is a disease of infancy and childhood. In children over ten years of age, the disease is rare, while in adult life it is so infrequent that many observers of large experience have not met with it. Varicella is particularly a disease of infancy and early childhood. Any varicella-like eruption in an adult should be looked upon with the greatest suspicion and the patients strictly isolated until by the history of the case, its source and the course of the disease, all doubt as to the diagnosis is dispelled."

Dr. James Nevens Hyde, in Pepper's System of Medicine, says: "Varicella is essentially a disease of early life, occurring almost exclusively in infants and young children."

Watson's Practice of Physic (Hartshoone), vol. 2, page 898: "The disorder is almost peculiar to infants and children of tender years." He cites two genuine cases in adults, one observed by Willam, a

male; one by Dr. Gregory, a female. Dr. Samuel Jones Gee (Reynolds' System of Medicine) says: "It is a disease of childhood."

Alex. Collie (Quaim's Dic. of Medicine) says: "It is certain it arises from contagion, and childhood is a predisposing cause. It occurs in children at the breast, and is seen with increasing frequency up to the fourth year, at which period it attains its maximum. It is less often found between four and twelve, and after twelve it may be said to disappear, although it is occasionally seen in adults."

Bartholow's Practice of Medicine, 5th ed., page 717: "It is a disease of childhood, and rarely attacks any above ten years of age."

Dr. Louis Thomas (Leipzig Zienssen's Cyclopaedia) says: "Varicella is a disease of childhood, and attacks by preference young children and even sucklings. In children over ten years of age, attacks are infrequent, and I never saw an adult suffering from varicella. Eruptions resembling varicella in adults always indicate viriola."

Wood's Practice of Medicine, 5th ed., page 419: "It is confined almost exclusively to children, though not entirely so. Cases have been observed in persons of middle age."

We deem it fair to infer from these authorities that the occurrence of varicella in an adult must be regarded as an exception to the rule. The eleven patients whose names and respective ages have been given above must be regarded, all of them, as exceptions, if it be concluded that they are true cases of varicella. A remarkable coincidence, indeed, to find at one time and place so many exceptions, "when observers of large experience have never met with a single one."

Second: Prodomal History or Period of Invasion:

The clinical facts as gathered from the patients themselves on this point are as follows:

1. James E. Montague was attacked December 12th 1897, with chills and fever and headache, which persisted for three days, when the eruption appeared, followed by an immediate cessation of the fever and a general feeling of betterment.

2. H. C. Hicks, chill and fever about two days before eruption. Subsequent history same as No. 1.

3. J. D. Douglass, chills followed by fever, persisting two and one half days before eruption appeared.

4. P. M. Gary, chill and fever January 5th, eruption January 8th.

5. W. T. Johnson, chill and fever three days before eruption appeared.

6. I. L. Howell, chill and fever two days before eruption appeared.

7. R. H. Banks, headache and fever three days before eruption appeared.

8. Scott Holman, chill and fever three days before eruption appeared.

9. G. W. Bradley, chill, fever, headache and backache attacked January 2, 1898, eruption abundant January 6—one of the worst cases.

10. James Bank (city), chill, fever, headache and backache three days before eruption appeared.

11. John H. Williams, Fort Motte, exposed January 4 and 5, chill and fever January 16th; eruption January 19th; vesiculation beginning January 23d.

On this point attention is asked to the following authorities:

L. Emmett Holt, Dis. of Children in Ch. on Varicella: "Slight fever and general indisposition may be noticed for twenty-four hours before eruption, but in most cases the eruption is the first symptom."

Dr. James Nevens Hyde: "If there be a prodromal stage of the disease (varicella) certainly in the vast majority of the little patients it can be recognized. During the last month the writer has observed the evolution of the disease in twenty children, gathered together in the Chicago Home for the Friendless, no one of whom was recognized as ailing before the eruption appeared."

Dr. Watson: "The eruption is preceded by little or no premonitory fever."

Dr. Osler: "The eruption usually develops within twenty-four hours."

Dr. Gee: "The eruption appears in the first twenty-four hours."

"Two or three days high fever with vomiting, headache and lightheadness before the eruption would exclude chicken-pox."

Dr. Louis Thomas: "In most cases the eruption of vesicles is the first symptom which marks the disease. Even very careful and anxious mothers usually notice no prodromal stage, and assert that their children up to the time of the eruption had been perfectly healthy. At other times and likewise by the testimony of non-medical witnesses an actual precursory stage of some duration appears to have existed."

Numerous others might be cited. But enough has been quoted to show that varicella as a rule does not have such a prodromal history as attaches itself to each and every one of the eleven cases here noted.

Wherefore, we conclude that in making up an opinion as of the character of their disease, varicella must be excluded. We will not prolong this paper by citing authorities as to the duration of the two diseases, as to the character of the eruption, &c. In these cases the

rash without a single exception appeared first on the forehead, whereas in chicken pox, the rule is that it appears first on the trunk. In these cases the eruption was at first papular, then vesicular, and about the eighth or ninth days became pustules which began to dry up about the twelfth day, and desquamate about the fifteenth or sixteenth days, completing this latter process about the twenty-first day. Several of the cases lasted as long as twenty-three days. Two of these patients were vaccinated on the 12th of January. None of them successfully. In our judgment the reasonable conclusion from the clinical data gleaned from these cases is that they are cases of discreet variola.

A. S. HYDRICK, M. D.
THOS. E. DOYLE, M. D.

EXPENSE SMALLPOX IN ORANGEBURG.

Orangeburg, S. C., December 24, 1898.

Dr. A. S. Hydrick, Orangeburg, S. C.

Dear Sir: In reply to your request, I herewith hand you the amount expended by city on account of the smallpox in our city last fall and winter.

The total amount charged to health department is $406.07. This does not include rations, etc., furnished, which was not charged to health department. I suppose that same would amount to, say $30 more.

Yours, &c.,

F. D. MEANS,
Clerk Board of Health.

SMALLPOX EPIDEMIC AT COLUMBIA.

Columbia, S. C., December 17, 1898.

Dr. James Evans, Secretary State Board of Health, Florence, S. C.

Dear Doctor: The epidemic of smallpox began in Columbia about the first of April, the disease having been imported from Orangeburg and White Rock. Previously there had been one case of unknown origin. The disease started from two foci at about the same time.

There was the usual doubt and dispute as to the nature of the disease, till, finally, Dr. C. P. Wertenbaker, Surgeon United States Marine Hospital Corps, was called in. He visited the pest house, in which fifty-three cases were confined, and pronounced the disease variola of mild type.

The pest house becoming overcrowded, a large brick factory, two and a half miles from town, was rented and converted into a hospital, with five wards. Dr. Ferguson, of Laurens, S. C., a recent graduate of the South Carolina Medical College, Charleston, was placed in charge of the Riverside Hospital, as it was called.

A large majority of the smallpox patients from Columbia, as well as nearly all from Richland County and a few from Lexington, Spartanburg and Orangeburg Counties, were received and treated in the Riverside Hospital.

SYNOPSIS OF PATIENTS.

Number of Cases.		Number of Deaths.	
Colored males	174	Colored males	6
Colored females	125	Colored females	1
			7
White males	10	Deaths uncomplicated	2
White females	8	Deaths complicated	5
	317		7

Age, youngest.....8 months.
Age, oldest.....86 years.
Probable expenses.....$7,500.00.

A. EARLE BOOZER,
President Board Health.

T. T. TALLEY,
Secretary Board Health.

DR. STUART'S REPORT ON SMALLPOX.

Dr. Jas. Evans, Secretary State Board of Health.

Dear Doctor: I beg leave to report the result of my visit to Orangeburg.

As a preliminary, we will note a few of the symptoms which make the distinction between smallpox and chicken pox. I know it is sometimes difficult to diagnose accurately between a severe case of chicken pox and varioloid, but when it is a violent case of smallpox, the question is easily determined. I had an extensive experience of this horrible disease after the war, for Beaufort and the surrounding country was full of it. In the first place, chicken pox is mostly a child's disease, ushered in with febrile symptoms and no appreciable chill. The febrile symptoms seldom last two days. Eruption first

shows itself below the head. This eruption is round and transparent, easily ruptured and as a rule *not* umbilicated. On the other hand, smallpox is ushered in with a chill, more or less severe; temperature much higher; tongue very much furred; some headache; pain in the bones, and, as a rule, the lumbar pains are very severe; the eruption is decidedly marked, appearing first on the *face,* then on the neck, and so down; the surface is flattened, umbilicated, often running together, and after breaking, crusts, and forms a mask over the face.

We will now note the case at Sheldon. John Mitchell, student at State Normal College. He had just left his college a few days when he came on the 29th December, to Beaufort and consulted Dr. Kennedy (colored). He had a severe chill, fever, headache, pain in the bones and back. On the 3d of January, I was notified by Dr. Kittles, who is familiar with smallpox, having attended many cases, that he had a case of smallpox at Sheldon station. The next day, January 4th, Dr. A. P. Prioleau and myself visited Sheldon and saw the patient, this same John Mitchell. There was such a mass of eruption over face and body, bearing every characteristic of smallpox, we unhesitatingly pronounced it smallpox, without one doubt on the minds of the three of us. I immediately, the same day, wrote to Dr. Simmons, and the next day to Dr. Lowman. I saw the case again on Monday, 10th. The soles of his feet were so covered with pustules he could not let them touch the ground.

Every precaution has been taken to prevent the spread of infection at Sheldon, some of the planters sending efficient help. Mitchell's case has gone through the regulation changes, and the pustules are forming into crusts, as I have been informed by Dr. Kittles. This is the ninth day since we first saw him; so far as we can judge, the twelfth day since the eruption appeared. A marked symptom of Mitchell's case was a very sore throat and constant spitting (ptyalism). Mitchell was a room-mate of Montague, the first case in Orangeburg. Montague was the man who came to the college from Greenville, and was taken sick a week after his arrival. His was not a severe case. I saw him, and he was convalescent. While in Greenville he staid in a house where the inmates had smallpox, and he slept in the bed with one of the men, published in the papers as having smallpox in Spartanburg. Consequently if the disease in Greenville and Spartanburg is smallpox, so is that in Orangeburg, and the case at Sheldon.

Now for the cases worthy of note in Orangeburg. Some of them were very mild; said they had never been vaccinated; but I thought

I saw a mark on one of their arms, and they might have been vaccinated in infancy.

I. D. Douglas—Case mild; first taken sick January 1st; eruption appeared on the 5th on face and neck, not abundant; eruption pitted; has had chickenpox before.

H. C. Hicks—Case very severe; taken sick on the 5th, with chill, fever, headache, pain in the back; eruption appeared on the 9th and matured on the 12th. This man is a mass of pustules from the crown of his head to the soles of his feet; certain parts of his body so sore he cannot touch them.

I. E. Howell—Case mild; taken on the 2d; eruption appeared on the 7th; eruption already subsiding on the 12th.

W. J. Johnson—Case mild; taken on the 7th; eruption on the 11th; sore throat and great flow of saliva.

George Brodie—Severe case; taken sick on the 2d; chill, fever, headache, backache; free flow of saliva; eruption appeared on the 6th; eruption so close together a match-head could not find room.

There were two or three other mild cases at the college.

Banks—The only case in the town limits; severe case; eruption very profuse and closely resembling the other severe cases described. This case, under charge of Dr. T. C. Doyles, who pronounced it smallpox.

If we had dealt only with the mild cases, there might have been a little doubt; but the severe cases proved it to my mind undoubtedly smallpox. These notes were all taken by myself at the bedside of the patients.

Two quite intelligent young colored men, acting as nurses to the patients, told me the stench was intolerable, and nauseated them every morning before the doors were opened. They asked if something could be given to destroy the smell. It was suggested to me by the physicians there that I should request the State Board of Health to send a physician to take charge of the victims of the epidemic, as it interfered materially with their private practice.

I am sorry to see that piece copied by the News and Courier. It is calculated to cause unpleasant feeling, and in writing my communications I had no thought of conflict with others. I simply performed my solemn duty. Visiting this loathsome disease is a most unpleasant and dangerous duty, only to be undertaken *as* a duty, and faithfully carried out. I only hope the gentlemen with whom I unfortunately differ will fully recognize these facts.

Yours very respectfully,

H. M. Stuart, M. D.,

SMALLPOX EPIDEMIC IN CITY OF SUMTER.

Sumter, S. C., November 15th, 1898.

Dr. James Evans, Secretary State Board of Health, Florence, S. C.

Dear Sir: In view of the prevalence of smallpox in Atlanta, Ga., and of suspected cases in Greenville, Rock Hill and other places, a special meeting of the Board of Health of the city of Sumter was called December 28th, 1897, to discuss the situation, and to take such steps as should seem proper to prevent the entrance of smallpox into this city.

After a thorough discussion, and in conformity to the views expressed by the practicing physicians of the city in a meeting held immediately before the meeting of the Board of Health, it was concluded that there was no immediate cause for alarm; that with the precautions observed at the points of origin of the disease, there was little likelihood that it would spread from where it was.

At the same time, the Board, in an official notice to the public, strenuously advised that all citizens who had not been recently successfully vaccinated have themselves vaccinated without delay, as a precautionary measure. This resulted in a great many having themselves vaccinated.

In January, 1898, the disease made its appearance in Orangeburg, S. C., at the State Colored Normal and Industrial Institute.

It was stated in the newspapers that the students at this school were under shotgun quarantine; but, just the same, these students were fleeing in great numbers, and with their trunks passing through Columbia and Sumter.

On January 10th, several Sumter students returned from Orangeburg directly from this college. Their arrival was reported to the Board of Health, and immediate steps were taken to arrest and confine them in an isolated place and vaccinate them, but they could not be located.

There was no house available as a place of detention. Tents were telegraphed for, and a special meeting of the Board of Health was called on January 10th. A house was ordered built for use as a camp of detention on a site half a mile beyond city limits. This was finished in three days. When completed the Health Officer was still making efforts to find the students, but they had either left the city or secreted themselves.

A number of cases of smallpox subsequently developed in the immediate vicinity of the residences of these students in "Golden Hill" section of the city, and the closest investigation could not trace the

source of the disease to other than contact with these students. Thus it is certain that Sumter was infected with smallpox by students from Orangeburg.

Nothing more was heard by the Board of Health until April 17th, 1898, when two suspicious cases were reported to it, although it was afterwards discovered that before this date there had been other cases in that section of the city where these students had been.

Dr. S. C. Baker, President Board of Health, and Dr. H. M. Stuckey, a member of the Board, investigated these two cases immediately, and called in several physicians who had had experience with the disease of smallpox previously, to diagnose the cases. They agreed that it was smallpox.

The Health Officer was at once put in charge of the infected houses and quarantined the whole district, vaccinating all people in the immediate vicinity.

The house erected by Board of Health had been burned by incendiaries, and a tent had to be improvised.

Tom Gaillard (colored), one of the cases, was taken to the detention camp site and placed in a comfortable tent, under guard and treatment, his boarding house being in a thickly settled neighborhood, where the houses were in six feet of each other.

There being no suitable accommodations for Mr. W. H. Pate (white), the other case, and his residence being large, of two-story build, and isolated, off from other inhabited places, he was permitted to remain in his room, under advice and at request of his attending physician. His family was vaccinated and quarantined for thirty days or more. Mr. Pate paid all expenses and observed the strictest quarantine rules and regulations.

A meeting of the Board of Health was immediately held and a smallpox hospital ordered built at smallpox camp site. Compulsory vaccination was ordered, but an ordinance to that effect had to be passed by city council, and giving Board of Health authority to arrest, separate and quarantine all persons infected with or exposed to contagious diseases. City council passed the ordinance promptly and it became law in two weeks. Council heartily co-operated with the Board of Health and appropriated all cash needed at that time.

In the meantime, vaccination was proceeded with. The city was divided into districts, and physicians were deputized, with authority of assistant Health Officers, with instructions to vaccinate all citizens who had not been vaccinated within six years and above six months of age. All who refused to be vaccinated their names were handed in to the Health Officer, and they were afterwards told that

they could either leave the city, get vaccinated, or be arrested for violation of an ordinance. When necessary, uniformed policemen were sent to assist the physicians in vaccinating.

A camp of detention was established, in which to detain those that had been exposed to smallpox. Two large three-story tobacco warehouses in an isolated place were rented and fitted up with cots, bath rooms, male and female, and necessary comfortable living accommodations.

Meals for the "suspects" were cooked there. All exposed persons received there were required to take a bath in warm water and bichloride of mercury in proportions of 1 to 2,000. Their clothes were boiled in water and bichloride 1 to 800 and thus disinfected with formaldehyde gas for twelve hours. The suspects were thus vaccinated and detained for sixteen days.

When a suspect showed signs of smallpox, that individual was separated and placed in the hospital ward, and the Health Officer was notified at once, who had patient sent to smallpox hospital in an ambulance immediately. When time of detention was out, suspects were again required to bathe in same disinfectants and their clothes were disinfected as when first admitted to detention camp.

When patients were turned over to physician in charge at hospital by the Health Officer they were first bathed and their clothes disinfected. When discharged as cured from smallpox hospital patients were required to take a bath in bichloride of mercury and warm water and their clothing was again disinfected. They were given official certificates of discharge, signed by physician and secretary of Health Officer.

Guards, attendants and cooks were placed at hospital and camp of detention.

Dr. Jesse A. Clifton, Jr., was physician in charge of detention camps, and who assisted Health Officer by inspecting from house to house and vaccinating and revaccinating at every house. Dr. Alexander C. Dick was physician in charge at hospital and all patients under guard in the city.

The Health Officer was in charge of disinfecting department. A powerful formaldehyde gas disinfector, a quantity of wood alchohol with which to generate formaldehyde gas, roll sulphur, bichloride and other disinfectants were purchased. All infected houses and their contents were disinfected by the Health Officer and all mattresses and pillows destroyed by fire.

Dr. Wirtenbaker, United States Marine Hospital expert, came over from Columbia on April 29th and pronounced the disease pre-

vailing here as smallpox. On Saturday morning, April 30th, the Mayor and Aldermen, President and members of Board of Health, the practicing physician, and secretary and Health Officer met Dr. Wertenbaker at council chamber. He gave an interesting talk about smallpox, and the advantages and necessity of vaccination, and instructed the city authorities and Board of Health what to do to stamp out the disease. His instructions were appreciated and acted upon.

On May 1st Board of Health was notified of six new cases. A special meeting was called and a systematic plan of operation instituted. The members of the Board were divided into committees, as follows: Messrs. William M. Graham and David W. Cuttino, committee on supplies, provisions, etc.; Mr. George D. Shore, on furniture, fixtures, etc; Dr. Henry M. Stuckey, on guards and attendants; Dr. S. Chandler Baker, President and administrative officer; Health Officer E. I. Read, on disinfecting, and executive officer.

Acting upon advice of Expert Wertenbaker, those families infected with smallpox who would pay for their guards and all other expenses were permitted to remain at home, under strict quarantine. These guards were selected by Dr. H. M. Stuckey, and sworn in as assistant Health Officers and under orders of the Health Officer of the Board of Health. No letter, notes, money nor any article whatsoever were permitted to pass out of these houses; no one was permitted to come out and no one to go in but Board of Health physicians, President and Health Officers.

Dr. S. C. Baker and Dr. H. M. Stuckey, of the Board of Health, attended all smallpox patients until Dr. Archie China took charge, about April 29th. Dr. A. C. Dick succeeded Dr. China on May 2d, 1898, the latter resigning to look after a private sanitarium with which he was connected.

The President, Health Officer, and physicians met at president's office 9 A. M. each day and discussed the situation. Written reports were submittted to President. Health Officer visited smallpox hospital and camp of detention every day, and received reports from guards and purchased all needed medicine, supplies, after seeing committee on supplies, etc.

All bills were audited by committees of several departments, approved by the President and attested by Health Officer, then paid by City Clerk and Treasurer.

A complete record was kept of all cases, and of all suspects under guard. President Board of Health had general supervision over all departments, and with Health Officer and executive officer, superintended generally the management of the outbreak. Thus two

officials were responsible for the enforcement of rules and regulations in every instance.

It was the duty of Health Officer to see that guards and attendants did their duty, and he who had to investigate all cases of smallpox, and if in doubt could call in a Board of Health physician to diagnose the case with him. All patients and suspects were transported to hospital and camp of detention under strict charge of Health Officer.

Permit me to make mention of the faithful and efficient administrative work of Dr. S. C. Baker, President Board of Health. He manifested great interest in the whole affair. He and Dr. H. M. Stuckey, his fellow-physician of the Board, sacrificed a great deal of their valuable time in working in the interest of the people of Sumter. Their services were given free, and the success of the Board of Health in checking the spread of smallpox is due in a great measure to their efforts, interest and management.

Drs. A. C. Dick and I. A. Clifton rendered faithful and efficient service, and are clever gentlemen to work with. I am indebted to these four physicians for courtesies, assistance and advice at all times during the prevalence of the disease.

There were 37 cases of smallpox, and 13 suspects under quarantine of the Board of Health. Of this number, 28 cases were handled between April 17th and June 10th and 60 suspects. Between August 6th and September 24th there were nine cases. These suspects all at one house on outskirts of the city.

The total cost of the outbreak, from April 17th to June 10th, and including nine cases and three suspects on outskirts of the city, August 6th to September 24th, and of house destroyed by fire, which cost $57.39, was $2,213.49. Detailed expense account is given below to give an idea of what nature of expense were:

Buildings, rent, lumber, tents, etc.	$335 75
Physicians.	430 85
Medicines and disinfectants.	101 95
Guards, cooks and attendants.	242 25
Vaccination and vaccine virus.	676 30
Supplies, groceries, cots, blankets, stoves, ambulance, labor, and general and incidental expense account. . . .	426 39
Grand total.	$2,213 49

Five thousand people were vaccinated by Board of Health, and probably 1,000 were voluntarily vaccinated before the disease actually appeared. There were 6 white and 31 colored cases. All white

and one colored case remained at home within the city and paid all expenses.

Sumter has passed through an outbreak of smallpox. Our population has been vaccinated, and this city is now safer than before the disease appeared.

The practicing physicians of the city, Mayor and City Council, Chief and Assistant Chief of Police and all the policemen, Clerk and Treasurer, and Superintendent of Streets, assisted department of health in every way to check the spread of the disease. There was no panic, nor unusual excitement among the citizens. The people got vaccinated, and schools were kept open and the school children and teachers were vaccinated first by the Board of Health.

E. I. REARDON,

Secretary and Health Officer Board of Health City of Sumter.

N. B.—There was one death—that of a colored man 22 years old. This individual had a severe case of syphilis at the time he had smallpox, and this accounts for his death.

Wherever syphilitic complications were added to smallpox the cases were of much longer duration and remained in the acute stages much longer. This was apparent even in some cases of children who had smallpox and indication of hereditary syphilis at the same time.

I might take occasion to add that syphilis, hereditary and acquired, is largely prevalent among the colored race and no doubt accounts for so much "tuberculosis" in colored people at an early age, and of so many deaths at an early age.

E. J. R.

EXPENSE ACCOUNT SMALLPOX EPIDEMIC, SUMTER TOWNSHIP.

Sumter, S. C., November 24th, 1898.

Dr. James Evans, Secretary State Board of Health, Florence, S. C.

Dear Sir: Six of the cases of smallpox were severe and some of the patients were so ill that the attending physician agreed with me that some light diet and nourishment like beef soup, rice, tea, coffee, etc., should be supplied. So I purchased these articles in small quantities for sick patients, as you will see by the bills.

The suspects were fed on grits, meal and bacon. Meal was often exchanged for flour in proportion to cost of meal.

I had to furnish wood, and allowance, as near as possible, one 50c. load per week to each infected place. I had to take all groceries, medicine, etc., out to the quarantine people or pay about 75c. per day

for drayage, so I used horse and buggy, so that my expense for going in and out and inspecting district, taking groceries, etc., was about 75c. per day on an average. I rode with Dr. S. C. Baker whenever possible, to avoid expense of horse and buggy, and sometimes used saddle horse at my own expense.

I issued groceries in small quantities in order to make people be economical, and as I was going out each day I took them as often as were absolutely essential.

Soap and concentrated lye were supplied for sanitary reasons, as I insisted on all clothes being washed and the houses washed with lye.

BILLS RENDERED.

E. J. Reardon	$62 50
W. T. Smith, M. D.	5 00
Joseph Sumter	5 00
Cyrus Waitis	5 50
City of Sumter	1 50
J. C. Spann, M. D.	5 10
Cauross Glover	2 50
Cyrus Waitis	34 50
Alfred Brunson	50 60
Wilson Washington	15 75
J. H. Payne	27 50
Ben Green	10 50
Titus Reese	2 25
Geo. F. Epperson	35 50
J. E. Walker	1 00
Hughson Ligon Co	1 00
Archie China, M. D.	50
Sam Weeks	2 20
A. J. China, M. D.	5 65
W. B. Boyle	8 00
Ducker & Burtman Co	9 55
J. F. W. Delorme	9 55
J. Ryttenberg & Sons	27 42
	$329 07

E. I. REARDON,
Sanitary Inspector

SMALLPOX EPIDEMIC AT PELHAM MILL.

Florence, S. C., May 24th, 1898.

Dr. James Evans, Secretary State Board of Health.

Dear Doctor: On the 21st March, under instructions from you, I left for Pelham Mill, S. C., to look after the epidemic existing there.

I reached Spartanburg on the morning of the 22d, and having to lay over there for several hours, called upon Dr. Blake, the President of the city Board of Health, who kindly took me to see a case which he had under treatment. After examination, I diagnosed it as a case of smallpox in the visicular stage, and so told Dr. Blake, who agreed with me.

I reached Pelham that afternoon, and on the morning of the 23d, found my two assistants, Messrs. Richardson and Greer, and presented them their commissions.

I first visited the pest house, which had been established about one mile north of the town, in an old church rented for the purpose.

There I found some twenty old negroes in the different stages of smallpox. In the town, composed of mill operatives, I found not less than twelve cases of the disease.

The town was under surveillance, red flags being placed at every infected house and guards established to prevent intercourse with the infected buildings.

I then proceeded to a house to house inspection and vaccination of all who had not been vaccinated. My going to Pelham seemed to cause the people to realize the importance of vaccination, and they would seek me out when it was not possible for me to get to them. They would also go to their physicians, and in this way I was enabled to do more work than I could have done otherwise.

As soon as I was able to do so, I took a tour through the country, to vaccinate and also to locate existing cases of smallpox, remove same to pest house or leave them at home under surveillance. When I could do so with safety, I preferred leaving the parties at home, it being much cheaper to do so. In the town (all whites) there has been 106 cases and two deaths—one adult male and one child male. With the adult there were complications, which, if they had not existed, the case very likely would have recovered from the smallpox.

In the surrounding country it has been almost impossible to get at the exact number of cases, as a great many negroes had no medical attendance, and the disposition was to keep it hid, from fear of being carried to the pest house. As near as I can arrive at it, there were between two and three hundred cases, principally negroes. Among

these there were two deaths—one negro adult male and one white child.

The epidemic has been a very mild one, a great many of the cases being so slight that the parties would go about their usual daily work without feeling any inconvenience.

The spread of the disease has been owing to this cause, in a great measure.

When asked, I supplied the physicians with vaccine matter, which materially assisted me in putting a stop to the disease.

My experience here has been that where parties had been properly vaccinated previous to the disease, they were exempt.

To illustrate: A family of eight whites, four were vaccinated; the other four, who had not been vaccinated, took smallpox; the others were exempt, though they remained in the same house, slept in the beds with those infected, &c. There were other similar instances.

From the time of my going to Pelham to leaving, there have been about twelve hundred persons vaccinated. All of the infected houses and clothing have been scoured, boiled and fumigated with sulphur.

For about three weeks there have been no new cases of smallpox at Pelham or in the surrounding country; so I think I can safely say the epidemic is at an end here.

Respectfully submitted.

P. B. Bacot, M. D.,
Sanitary Inspector State Board of Health.

SMALLPOX EPIDEMIC IN SPARTANBURG CITY AND COUNTY.

Spartanburg, S. C., November 23, 1898.

To Dr. James Evans, Secretary State Board of Health.

Dear Doctor: In reply to your last letter, I have compiled the following report of the smallpox epidemic in Spartanburg city and county from December 26th, 1897, to September 1st, 1898:

The first case was reported in the city December 26th, 1897; came directly from Greenville, S. C.; escaped from house guarded as first point of infection in Greenville. The second case came on December 27th, from colored school at Orangeburg, S. C. Other cases developed from first case in the city among negroes who worked in same cellar with said case when the eruption was first noticed. The first case at Beaumont mill came from Anderson County, the eruption appearing the day after arrival. This man had been going from place

to place where cotton mills are located, and his stories are contradictory as to any exposure. The Arkwright cases originated from Beaumont. Glendale cases had their infection brought from Pelham mills. The first cases were contracted in the city. Fairmont cases came from Greenville.

	Cases.	Deaths.
Spartanburg city	163	2
Beaumont Mill	129	2
Arkwright Mill	23	1
Glendale Mill	26	0
Fairmont	10	0
Fair Forest	4	0
Totals	355	5

As to cost of epidemic, it has been difficult to get at the amount, because it has been divided up between State, city, mill authorities, county and private individuals. A number of patients from Beaumont and Arkwright were cared for by the State and city together. As nearly as I can get at the number cared for by each, with expense, is as follows. This includes the expense of the city as to vaccination:

	Cases.	Expense.
Spartanburg city	222	$1,615 00
Beaumont Mill	80	400 00
Arkwright Mill	23	409 00
Glendale Mill	26	248 00
Fair Forest	4	50 00
Totals	355	$2,722 00

This represents, as nearly as I can estimate, in round numbers, the cost of the entire epidemic in this city and county. This cost includes the bills already paid by the State Board and those sent in remaining unpaid. The supply bills of Arkwright and Glendale, part of the guard fees, and the medical account of sanitary inspector, are all remaining unpaid now, but they are included in the cost.

If there are any other items you wish particulars about, please inform me.

Regretting that I have been unable to get this up for you sooner,

I remain, very respectfully,

L. J. BLAKE.

EXPENSES SMALLPOX EPIDEMIC IN RICHLAND COUNTY, OUTSIDE OF COLUMBIA.

Columbia, S. C., December 13, 1898.

Dr. James Evans, Secretary State Board of Health.

Dear Sir: Replying to yours of the 12th inst., I beg to state that by an arrangement with the city Board of Health, we sent to the pest house, established by the city (with a few exceptions), all cases of smallpox occurring outside of the limits of the city of Columbia that were reported to us. If any death occurred among these, the report would appear in the records of the city Board of Health. We have no official knowledge of any.

The city treated twenty-five smallpox patients for us. The county physician treated twenty-two, and one convict was treated by the chain-gang physician, making a total of forty-eight cases, of which we have official knowledge; but, from information received, we believe that the above represents not more than 33 per cent. of the number of cases of smallpox that existed outside of the city limits during the prevalence of the epidemic, for quite a number living in the suburbs, or within easy reach of the city, were treated as city patients; and, again, quite a number of cases seemed to have been successfully concealed by the afflicted and their families.

By request of this office, our county Board of Health commissioned all of the physicians of the county who resided outside of the city limits as health officers, with instructions to vaccinate all within their reach who were not immune, at the expense of the county, and to report on a form prepared by us, in which is given the name, age, sex and color of the parties vaccinated.

The total expense of the smallpox epidemic to the county of Richland was $2,004.94. This includes the treatment and maintenance of the cases treated for us at the city pest house, the purchase of vaccine points, and the charge of the physicians for vaccinating, cost of transportation, fumigation, and all other incidental expenses.

If you should desire any further information as to above particulars, will be pleased to furnish it as far as I can.

Yours truly,

W. W. Weston,
County Supervisor Richland County.

THE SMALLPOX EPIDEMIC AT GREENVILLE.

Greenville, S. C., December 8th, 1898.

James Evans, M. D., Secretary State Board of Health, Florence, S. C.

Dear Sir: In reply to yours of the 2d inst., asking for information in regard to the smallpox epidemic in this city last winter, we respectfully report as follows:

The first case was that of a negro, who had recently come from Columbia.

The total number of cases was 57—whites, 6; blacks, 31. Adults, 33; children, 4.

Four did not contract the disease here, but came to the city after the appearance of the eruption.

The Board of Health had no jurisdiction beyond the city limits, and we therefore cannot report as to the number of cases in the country.

The expense of stamping out the disease was about $3,000.

Very respectfully,

C. A. SIMPSON, Secretary.

PRACTICING PHYSICIANS IN SOUTH CAROLINA.

Names, with postoffice address, of physicians who have registered in the office of Clerk of the Court of the county in which they reside, and who are legally qualified to practice medicine in South Carolina:

ANDERSON COUNTY.

Name.	Postoffice.
C. V. Barnes	Annie
B. F. Brown	Williamston
W. M. Brockman	Pelzer
James L .Bolt	Waco
R. S. Cheshire	Honea Path
W. A. Clinkscales	Starr
R. F. Divver	Starr
I. P. Duckett	Anderson
I. G. Duckworth	Five Forks
R. B. Day	Pendleton
L. A. Earle	Anderson
S. M. Elrod	Guyton
E. C. Frierson	Anderson
W. D. Hutto	Williamston
S. R. Heller	Broyles
I. M. Holcombe	Belton
I. C. Harris	Anderson
W. T. Hunt	Townville
C. N. Hough	Honea Path
W. S. Hutchinson	Iola
W. M. Long	Piedmont
W. H. Nardin	Anderson
W. H. Nardin, Jr	Anderson
N. J. Newell	Anderson
Sam'l. M. Orr	Anderson
S. J. Pickens	Pendleton
W. H. Pepper	Roberts

Name.	Postoffice.
J. O. Rosamond	Bushy Creek
N. T. Richardson	Piedmont
R. P. Ranson	Williamston
M. L. Sharpe	Spartanburg
W. K. Sharp	Townville
P. H. E. Sloan	Pendleton
John F. Shirley	Honea Path
L. T. Shirley	Central
T. E. Stokes	Belton
W. M. Smith	Equality
R. E. Thompson	Anderson
M. A. Thompson	Storeville
W. A. Tripp	Burdine
I. Bennett	Townsend
J. O. Wilhite	Anderson
W. W. Wilson	Williamston
R. G. Witherspoon	Holland's Store
W W. Watkins	Pendleton

BAMBERG COUNTY.

None registered up to December 5, 1898.

BARNWELL COUNTY.

A. W. Bailey	Ellenton
I. F. Baggote	Bamberg
J. B. Block	Bamberg
D. R. Briggs	Blackville
D. W. Barton	Bamberg
H. M. Barton	Bamberg
H. M. Brother	Olar
C. D. Clarkson	Allendale
F. W. Chitty	Olar
John L. Copeland	Ehrhardt
C. W. Erwin	Erwinton
Jas. D. Erwin, Jr	Erwinton
E. W. Ellis	Martin's
W. H. N. Folk	Ehrhardt
H. G. George	Fairfax
R. A. Gyles	Blackville
L. S. Hay	Allendale

Name.	Postoffice.
W. S. Hay	George Creek
N. F. Kirkland	Buford Bridge
W. W. Kearse	Buford Bridge
E. Kirkland	Buford Bridge
R. C. Kirkland	Buford Bridge
F. C. Lewis	Sycamore
Asbury B. McLear	Ehrhardt
J. R. McCormick	Govan
G. W. Nevels	Blackville
J. W. Ogilvie	Allendale
J. P. Ott	Bamberg
W. B. Rice	Bamberg
B. F. Peeples	Blackville
E. L. Patterson	Barnwell
J. H. Roberts	Ehrhardt
S. P. Rentz	Hartzog
L. C. Stephens	Blackville
J. M. Smith	Williston
W. C. Smith	Williston
M. T. Sanders	Barnwell
S. H. Tindal	Denmark
G. R. C. Todd	Barnwell
J. H. Thompson	Martin's
W. J. Gainey	Fairfax

BEAUFORT COUNTY.

Miles B. Cope	Port Royal
Wm. P. Gibbes	Beaufort
T. O. Hutson	Beaufort
N. J. Kennedy	Beaufort
B. S. Kittles	Yemassee
Paul Pritchard	Bluffton
A. P. Prioleau	Beaufort
H. M. Stuart	Beaufort
Allan Stuart	Beaufort
J. A. Whitman	Beaufort
S. B. Thompson	Port Royal
M. G. Elliott	Beaufort

BERKELEY COUNTY.

Name.	Postoffice.
John Y. DuPre	Mt. Pleasant
James L. Beckett	John's Island
S. Bannister	St. Stephens
W. L. Wallace	St. Stephens
E. E. Blake	Cain Hoy
E. M. Royall	Mt. Pleasant
T. N. Roberts	Summerville
E. N. Ayers (dead)	Long Ridge
Joseph Maybank	Charleston
H. G. Frampton	Summerville
John Henry Alston	Summerville
W. H. Prioleau	Summerville
Wm. Joel Bowen	Mt. Pleasant
Martin A. Floyd	St. Stephens
D. M. Breaker	Monck's Corner
Wm. J. Haselden	Eutawville

CHARLESTON COUNTY.

Isaac W. Angel	Charleston
C. P. Aimar, Jr	Charleston
J. L. Buist	Charleston
A. N. Bellinger	Charleston
R. L. Brodie	Charleston
A. E. Baker	Charleston
B. E. Baker	Charleston
Louis D. Barbot	Charleston
Israel Brown	Charleston
A. Johnson Buist	Charleston
Lucy Hughes Brown	Charleston
William D. Crum	Charleston
F. V. Cleckley	Charleston
R. L. Cathcart	Charleston
E. W. Carpenter	Charleston
P. Gourdin DeSaussure	Charleston
J. L. Dawson, Jr	Charleston
S. D. Doar	McClellanville
A. W. DeSaussure	Charleston
J. J. Edwards	Charleston

Name:	Postoffice.
D. W. Ellis	James Island
Augustus Fitch	Charleston
John Forrest	Charleston
Thos. S. Grimke	Charleston
J. Mercier Glenn	Charleston
W. A. Auzer	Charleston
A. B. Horlbeck	Charleston
Henry Horlbeck	Charleston
Wm. A. Johnson	Charleston
Wm. Az. Johnson	Charleston
E. A. Kellers	Charleston
P. Sidney Kirk	Charleston
Chas. W. Kolloch	Charleston
E. J. Kinloch	Charleston
A. C. Kellers	Charleston
M. S. Kirk	Charleston
B. M. Lebby	Charleston
A. Lebby, Jr	Charleston
J. A. Lockwood	Charleston
Anna M. Longshore	Charleston
W. J. Linley	Charleston
Allard Memminger	Charleston
Lane Mullaly	Charleston
Joseph Maybank	Charleston
J. Creighton Mitchell	Charleston
J. C. McKewn	Charleston
T. B. McDow	Charleston
A. C. McClellan	Charleston
George G. McMurphy	Charleston
Francis L. Parker	Charleston
W. Peyre Porcher	Charleston
Daniel T. Pope	Edisto Island
E. F. Parker	Charleston
Wm. C. Ravenel	Charleston
Jenkins M. Pope	Charleston
R. Barnwell Rhett	Charleston
Edward R. Ravenel	Charleston
Chas. Mayrant Rees	Charleston
Thos. D. Rankin	Charleston
J. A. Robinson, Jr	Charleston
Edward Rutledge	Charleston

Name.	Postoffice.
T. Grange Simons	Charleston
Manning Simons	Charleston
C. H. Schroder	Charleston
Aug. H. Schwacke	Charleston
T. F. Sams	Charleston
Thos. H. Scharlock	Charleston
T. S. Thompson	Charleston
A. R. Taft	Charleston
Jas. B. Wiggins	Charleston
D. R. Williams	Charleston
J. C. Woodruff	Charleston
Robert Wilson, Jr	Charleston
Thos. P. Whaley	Charleston
A. H. Schwarke	Charleston
A. I. Buist	Charleston
Wm. C. Ravenel	Charleston
H. B. Horlbeck, Health Officer	Charleston
Robert Lebby, Quarantine Physician	James Island
H. W. DeSaussure	Charleston
Lucy Hughes Brown	Charleston

CHEROKEE COUNTY.

There are only two physicians registered here so far (Dec. 6, 1898), and they are S .G. Sarratt and W. L. Littlemeyer. I think most of the physicians now in this county are registered in Union, York and Spartanburg Counties, from which this county was formed.

J. E. Jefferies,
Clerk Court Cherokee County.

CHESTER COUNTY.

A. F. Anderson	Lowrysville
J. Clark Brawley	Cabal
John M. Brice	Chester
D. M. Cox	Landsford
W. B. Cox	Landsford
W. J. W. Coruwell	Coruwell
C. L. Clawson	Chester
S. M. Davega	Chester
R. L. Douglass	Rodman

Name.	Postoffice.
W. D. Hooper (colored) left Chester	
B. E. Keel, Jr	Banks
David Lyle	Hollis
J. A. Macon (colored)	Hollis
T. G. Miller	Hollis
C. B. McKeown	Fort Lawn
J. M. McCollum	Leeds
C. A. McLurkin	Halsellville
T. M. Pryor	Chester
W. DeK. Wylie	Richburg
J. Simpson Wise	Halsellville
A. P. McNeel	
J. P. Young, now in Cuba, U. S. Army surgeon	
H. E. McConnell	Chester
Samuel Lindsay	Chester
J. M. Woodham	Edgmoor
Geo. W. Jordan	Rodman

CHESTERFIELD COUNTY.

G. W. Gregory	Catarrh
J. H. Hardin	Society Hill
W. I. Hill	Big Lick, N. C.
J. A. James	Cheraw
T. H. James	Cheraw
T. E. Lucas	Chesterfield
R. P. Miller	Jefferson
B. C. Moore	Hornsboro
D. M. Prince	Cheraw
A. M. Redfearn	Maysville
J. F. Rogers	Hornsboro
T. Threatt	Planis
B. H. Therman	Cheraw
D. T. Teal	Chesterfield
J. J. Wilson	Cheraw
L. P. Waddill	Mt. Croghan

Dr. J. W. McCanlers is practicing here, but not registered in this county.

Drs. J. H. Harden, D. M. Prince, A. M. Redfearn, J. F. Rogers, D. L. Teal and L. P. Waddill have each moved out of the county.

CLARENDON COUNTY.

Name.	Postoffice.
I. N. Woods	New Zion
B. M. Badger	Summerton
A. J. Briggs	Summerton
J. M. Fladger	Summerton
L. W. Nettles	Foreston
H. L. Wilson	Jordan
P. M. Sally	Pinewood
M. D. Murray	Pinewood
W. E. Brown	Manning
W. M. Brockinton	Manning
G. L. Dickson	Manning
W. E. Dinkins	Manning
J. F. Powell	Remini

DARLINGTON COUNTY.

John A. Boyd	Darlington
J. H. Blackwell	Darlington
John E. Boyd (in army)	Darlington
Simon Beckham	Hartsville
Jas. A. Cole	Timmonsville
J. F. Culpepper	Timmonsville
F. P. Covington	Florence
Jas. Evans	Florence
Jas. W. Earle	Darlington
Rob't. L. Edwards	Darlington
W. L. Gallaway	Darlington
A. M. Hill	Darlington
M. L. Harrell	Hot Springs, Ark.
S. D. Harrell	Oates
Thos. E. Hawle	Hartsville
C. W. Harris	Cypress
M. S. Iseman	Georgetown
J. B. Jarrett	Florence
J. M. Josey	Cypress
B. S. Lucas	Hartsville
John Lunney	Darlington
H. J. Lee	Lydia
R. E. Lee	Darlington
M. G. Lee	Lydia

Name.	Postoffice.
J. B. Mims	Lamar
J. E. McLure	Bishopville
B. C. Norment	Darlington
J. P. Parrott	Philadelphia
G. G. Palmer	Cartersville
J. A. Rutledge	Clyde
P. A. Wilson	Darlington
J. B. C. Wright	Timmonsville
R. B. R. C. Wallace	Lydia
Jas. W. Williamson	Doves
F. F. Wilson	Doves
J. F. Watson	Lamar

DORCHESTER COUNTY.

Abott T. Henry	St. Georges
D. Flud	Summerville
P. L. Horn	St. Georges
H. W. Ilderton	Summerville
J. P. Johnston	Reevesville
R. J. J. Limehouse	Summerville
J. P. Mallard	St. Georges
D. F. Moorer	St. Georges
S. L. Selleck	St. Georges
W. B. Way	Ridgeville

EDGEFIELD COUNTY.

G. A. Bunch	Clark
F. W. P. Butler	Edgefield
D. A. J. Beall	Parksville
J. H. Crafton	Colliers
C. P. Devore	Edgefield
J. Walter Hill	Edgefield
T. J. Hunter	Trenton
J. C. Lanier	Longmires
R. C. Mayson	Pleasant Lane
Ben. Lee Allen	Fruit Hill
R. A. Marsh	Edgefield
Walter Nicholson	Pleasant Lane
W. D. Ouzts	Elmwood
J. H. Pattison	Self

Name.	Postoffice.
H. A. Shaw	Currytown
C. S. Strother	Johnston
J. H. Self	Self
J. G. Tompkins	Edgefield
R. G. Turner	Vaucluse
W. D. Timmerman	Timmerman

FAIRFIELD COUNTY.

R. C. Annette	Monticello
J. C. Buchanan	Winnsboro
T. G. Douglass	Albion
J. E. Douglass	Albion
R. B. Hanahan	Winnsboro
Eli Harrison	Longtown
E. C. Jeter	Jenkinsville
Wm. B. Smith	Blackstock
W. F. Mitchell	Avon
T. B. McKinstry	Horeb.
I. G. McMeekin	Jenkinsville.
John D. Palmer	Ridgeway.
George W. Poovey	Longtown
D. M. Provener	Longtown
C. L. Pixley	White Oak.
J. A. Scott	Milford.
J. W. Leam	Ridgeway

GREENVILLE COUNTY.

D. R. Anderson	Fairview
M. G. Berry (don't practice)	Greenville
D. C. Bennett	Simpsonville
W. J. Bramlett	Greenville
Thos. W. Bailey	Greenville
W. C. Black	Greenville
J. S Bruce	Sandy Flat
G. H. Bottum	Greenville
J. C. Caldwell	Gowansville
A. J. Creighton	Greer's
L. E. Cunningham	Greer's
J. K. S. Case	Riverview

Name.	Postoffice.
I. F. Donnald	Piedmont
L. L. Earle	Greenville
J. W. Epton	Marietta
H. G. Evans	Greenville
J. B. Earle	Greenville
C. B. Earle	Greenville
Davis Furman	Greenville
B. F. Few	Greer's
Wade D. Fowler	Simpsonville
B. F. Goodlet	Traveler's Rest
J. W. Hewell	Greenville
J. M. Holcomb	Fountain Inn
I. W. Harrison	Piedmont
W. B. Harrison	Fork Shoals
E. B. Hendricks	Reedy River
C. C. Jones	Greenville
D. B. Jackson	Gowanville
F. G. James	O'Neal
S. S. Knight	Fountain Inn
I. P. Latimer (don't practice)	Greenville
W. P. League	Simpsonville
T. R. League	Greer's
W. F. Leonard	Greenville
J. A. Lindsay	Highland
W. M. Long	Piedmont
I. H. Maxwell	Greenville
W. A. Mooney	Gowensville
W. S. Miller	Greenville
Thos. E. Marrow	Tyger
I. E. McKinney	Bellview
W. S. Polk	Greenville
E. F. S. Rowley	Greenville
H. R. Rutledge	Greenville
J. M. Richardson	Piedmont
W. A. Ross	Fork Shoals
G. T. Swandale	Greenville
W. T. Stoddard	Fairview
W. H. Stokes	Chandler
H. B. Stewart	Fairview
M. L. West	Marietta

Name.	Postoffice.
W. E. Wright	Greenville
T. E. Wood	Tigersville
Andrew Wallace	Greenville
G. T. Walker	Greer's
H. V. Westmoreland	Greer's
I. A. White	Pelham
C. Q. West	Princeton
A. White	Mauldin

HORRY COUNTY.

E Norton	Conway
R. K. Bethea	Socastee
J. S. Dusenbury	Conway
A. D. Lewis	Nichols
A. H. J. Galbraith	Conway

KERSHAW COUNTY.

Ernest C. Brasington, Haile Gold Mine,	Lancaster Co
Wm. J. Burdell	Camden
J. W. Corbett	Camden
W. Y. Clyburn	Westville
A. A. Moore	Camden
S. M. McCutchen	No post office
M. J. Wittkowsky	Camden
Sidney C. Zemp	Camden
D. L. DeSaussure	Camden

LANCASTER COUNTY.

Robert S. Beekham	Kershuw.
E. C. Brasington	Kershaw.
M. P. Crawford	Lancaster.
Wm. M. Crawford	Lancaster.
T. L. Doster	Tradesville.
I. D. Funderburk	Lancaster.
L. T. Gregory	Kershaw.
F. C. Hinson	Primis.
S. J. Hinson	Heath Springs.
S. A. Kell	Dry Creek.
R. C. McManus	Lancaster.
E. S. McDow	Heath Springs.

Name.	Postoffice.
J. N. Nisbet	Van Wyck.
G. W. Provey	Lancaster.
James E. Poore	Lancaster.
R. M. Potts	Pleasant Valley.
T. J. Strait	Lancaster.
W. H. Sapp	Tradesville.
J. H. Witherspoon	Lancaster.
M. R. Witherspoon	Lancaster.
C. C. Welsh	Longsville.
B. J. Witherspoon	Lancaster.

LAURENS COUNTY.

A. K. Aiken	Laurens
Job J. Boozer	Clinton
John A. Barksdale	Laurens
Sam F. Blakely	Ora
N. J. Balentine	Brewerton
S. L. N. Bailey	Clinton
John Preston Bell	Barksdale
M. C. Cox	Ora
J. R. Culbertson	Greycourt
A. J. Christopher	Laurens
Hastings N. Dial	Laurens
J. L. Dorman	Brewerton
Jas. N. Davis	Clinton
Edgar Clay Doyle	Laurens
Rofe E. Hughes	Laurens
C. D. East	Kinards
J. R. Fowler	Ora
Manning Edwards	Merno
A. R. Fuller	Mountville
S. M. Henderson	Waterloo
W. R. Harris	Waterloo
T. D. Hairston	Mountville
W. C. Irby	Laurens
J. A. Miller	Cross Hill
J. O. Martin	Princeton
A. A. Madden	Vaughnville
J. M. McCarley	Ora
Thos. McCoy	Laurens
E. T. McIlwain	Cross Hill

Name.	Postoffice.
J. T. Poole	Laurens
E. W. Penson	Cross Hill
B. F. Posey	Laurens
J. P. Simpson	Laurens
J. R. Smith	Mt. Galagher
C. A. Saxon	Huntington
F. M. Setzler	Roseborough
T. E. Todd	Laurens
E. T. Taylor	Clinton
A. T. Simpleton	Laurens
J. I. Wilbor	Waterloo
John S. Wolf	Alma
John W. Young	Clinton
W. H. Young	Clinton
Wm. Dodson	Laurens
Rolfe E. Hughes	Laurens
O. B. Evans	Kinards
W. E. Goddard	Mountville
J. B. Owens	Cross Hill

LEXINGTON COUNTY.

W. T. Brooker	Swansea
D. M. Crosson	Leesville
J. W. Eargle	Chapin
A. S. Eleazer	Spring Hill
T. S. Fox	Batesburg
J. W. Geiger	Brookland
R. W. Hite	Delmar
L. A. Griffith (Surgeon 2d Regt.)	Savannah
F. R. Geiger	Irmo
E. K. Hardin	Batesburg
M. Q. Hendrix	Lexington
H. T. Kendall	Brookland
D. R. Kneece	Lorena
W. L. Keisler	Rocky Well
W. D. Kneece	Ella
C. E. Leaphart	Lexington
J. L. Shuler	Selwood
F. L. Sandel	Brookland
E. F. Strother	Batesburg

Name.	Postoffice.
J. M. Sease	Little Mountain
J. W. Sandel	Chapin
B. R. Wyse	Countsville
J. G. Williams	Oakville
J. J. Wingard	Lexington

MARION COUNTY.

D. F. Miles	Marion
Jos. P. Earing	Dillon
C. L. Ford	Mullins
I. C. Mace	Marion
L. C. McSwain	Latta
A. McIntyre	Marion
I. C. McMillan	Marion
Howard Reedy	Little Rock
Jack C. Smith	Centenary
Wade Stackhouse	Donoho
French A. Smith	Mullins
Maxcy Smith	Gaddy
E. B. Utley	Columbia
T. J. Weatherby	Dillon
S. P. Watson	Latta
E. B. Smith	Centenary
E. L. Brown	Latta
J. J. Bethea	Mullins
F. H. Conoly	Zion
J. H. David	Dillon
W. M. Reedy	Mineral Springs
R. B. Covington	Clio

MARLBORO COUNTY.

R. B. Covington	Clio
H. R. Easterling	Bennettsville
C. S. Evans	Clio
A. C. Everett	Laurinburg, N. C.
I. A. Faison	Bennettsville
Douglass Hamer	McCall
I. T. Jennings	Bennettsville
I. L. Jordan	Bennettsville
I. F. Kennedy	Bennettsville

Name.	Postoffice.
I. H. Lane	Clio
C. R. May	Blenheim
I. W. McNair	Newtonville
I. C. McKenzie	Tatum
N. M. McLean	Gibson Station
I. S. Napier	Blenheim
T. McL. Northrope	Richmond County, N. C.
R. J. Patterson	Bennettsville
I. H. Reese	Tatum
R. S. Turlington	Bennettsville
W. J. Craslane	Bennettsville

ORANGEBURG COUNTY.

J. C. Arant	Lyons
A. R. Able	St. Matthews
L. M. Able	St. Matthews
L. B. Bales	Norway
C. H. Able	Norway
A. C. Baxter	Elloree
Arthur W. Browning	Elloree
A. O. Bowman	Rowesville
W. M. Carn	Elloree
A. C. Dukes	Orangeburg
T. C. Doyle	Orangeburg
J. M. Davis	Norths
M. J. D. Dantzler	Elloree
H. N. Fair	St. Matthews
J. D. S. Fairy	Orangeburg
Jos. K. Fairy	Cameron
P. L. Felder	Felderville
M. S. Gressett	Branchville
F. J. Geiger	St. Matthews
A. S. Hydrick	Orangeburg
D. L. Hildebrand	Advance
Lewis D. Haigler	Cameron
A. A. Hoeger	Branchville
Thos. A. Jones	Springfield
W. S. Jennings	Orangeburg
T. A. Jeffords	Orangeburg
J. J. Johnson	Centre Hill
T. K. Keller	Cameron

Name.	Postoffice.
J. W. Lowman	Orangeburg
Wm. R. Lowman	Orangeburg
O. R. Lowman	Orangeburg
W. H. Lawton	Vances
E. A. Laird	Advance
Jos. E. Lee	Silver Spring
Dan'l Moorer (colored)	Orangeburg
John A. McCreary	Springfield
T. J. McLaughlin	St. Matthews
I. M. Oliver	Orangeburg
H. A. Odom	Springfield
W. L. Pou	St. Matthews
Thos. J. Pou	Livingston
I. L. Riley	Middlepen
Jno. E. Rickenbacker	Orangeburg
M. G. Salley	Orangeburg
J. W. Summers	Cameron
N. W. Salley	Norway
J. P. Stroman	Springfield
F. L. Sandel	Lone Star
L. K. Sturkie	Springfield
I. G. Salley	Norths
Wm. P. Shuler	Middlepeu
C. R. Taber	Fort Motte
N. C. Whetstone	Branchville
W. W. Wolfe	Fort Motte
S. F. Williams	Norths
F. F. Wannamaker	Elloree
F. J. Summers	Cameron
G. C. Summers	Cameron
J. H. Price	Raymond
D. E. Connor	Bowman

NEWBERRY COUNTY.

Wilson C. Brown	Newberry
Jacob L. Bowers	Prosperity
Richard C. Carlisle	Liberty Hall
G. B. Caldwell	Caldwell
W. A. Dunn	Pomaria
P. G. Ellesor	Newberry

Name.	Postoffice.
James K. Gilder	Newberry
Jno. C. Halfacre	Newberry
W. C. Holloway	Chappell's
W. G. Houseal	Newberry
E. O. Hentz	Walton
Geo. Y. Hunter	Prosperity
James P. Johnson	Jalapa
Levi L. Kibler	Prosperity
Jas. M. Kibler	Newberry
William E. Lake	Utopia
Andrew L. Longshore	Silver Street
Orlando B. Mayer	Newberry
Arthur A. Madden	Chappell's
Jno. H. McCullough	Newberry
Jas. H. McIntosh	Newberry
Jas. M. H. Ruff	Glymphville
Geo. A. Setzler	Pomaria
Jno. M. Sease	Little Mountain
Jno. P. Simpson	Prosperity
Wm. D. Senn	Longshore
Van Smith	Jalapa
Thos. W. Smith	Gary
Daniel H. Werts	Sligh's
C. T. Wyche	Prosperity

OCONEE COUNTY.

Burt Mitchell	Westminster
D. B. Darby	Walhalla
Jesse W. Bell	Walhalla
J. M. McClanahan	Retreat
Joseph S. Stribling	Seneca
W. R. Doyle	Seneca
E. B. Webb	Fair Play
James Henry Moore	Fair Play
C. M. Walker	Fort Madison
W. H. McClure	Westminster
James A. Johns	Westminster

PICKENS COUNTY.

Name.	Postoffice.
Lawrence G. Clayton	Central
Jno. M. Crenshaw	Table Mountain
J. W. Epton	Dacusville
G. W. Earle	Pickens C. H.
T. W. Folger	Central
W. T. Field	Pickens C. H.
R. J. Gilliland	Easley
Robt. Kirksey	Pickens C. H.
Jesse J. Morgan	Dacusville
Geo. E. Robinson	Liberty
R. F. Smith	Easley
W. A. Sheldon	Liberty
S. L. Shirley	Central
C. M. Walker	Fort Madison

RICHLAND COUNTY.

John A. Keith	Eastover
D. S. Pope	Columbia
Frank Green	Columbia
J. L. Thompson	Columbia
L. K. Philpot	Columbia
J. D. Lever	Richland Co.
E. L. Abney	Richland Co.
F. D. Kendall	Columbia
J. F. Ensor	Columbia
Hubert Claytor	Hopkins
W. W. Ray	Congaree
J. E. Lee	Hopkins
J. R. Hopkins	Hopkins
C. C. Johnson	Columbia
W. M. Lester	Columbia
T. M. Dubose	Columbia
J. W. Babcock	Columbia
C. L. Walton	Columbia
A. Earle Boozer	Columbia
C. J. Oliveros	Columbia
Sarah C. Allen	Columbia
Jos. J. Watson	Columbia
Robt. D. Earle	Columbia

Name.	Postoffice.
Robt. W. Gibbes	Columbia
E. M. Whaley	Columbia
Wm. Weston	Columbia
B. W. Taylor	Columbia
Lawrence M. Hook	Eastover
W. J. Rivers	Eastover
H. W. Rice (not registered)	Columbia
A. B. Knowlton (not registered)	Columbia
J. B. Davis (not registered)	Killians
Eleanor S. Everhard (registered)	Columbia

SALUDA COUNTY.

J. J. Kirksey	Saluda
F. B. Gunter	Saluda

SUMTER COUNTY.

W. W. Anderson	Statesburg
N. J. Alford	Wisacky
J. J. Bossard	Sumter
F. M. Beckham	Sumter
C. S. Britton	Smithville
S. C. Baker	Sumter
E. S. Booth	Mannville
C. A. Barron	Mayesville or Bishopville
A. J. China	Sumter
Archie China	Sumter
Henry J. DuBose	Mechanicsville
R. E. Dennis	Bishopville
E. F. Darby	Magnolia
F. M. Dwight	Wedgefield
John H. Furman	Sumter
R. B. Furman	Silver
H. D. Green	Hagood
J. S. Hughson	Sumter
J. W. Hudson	Mayesville
W. W. B. James	Sumter
T. R. Kelly	Mott's X Roads
J. A. Mayes	Mayesville
J. A. Mood	Sumter
R. M. Moore	Hagood

Name.	Postoffice.
H. J. McLaurin	Sumter
R. Y. McLeod	Bishopville
G. W. McElveen	Shiloh
B. McLaughlin	Hagood
T. R. McElveen	Shiloh
C. P. Osteen	Smithville
W. J. Pringle	Sumter
I. C. Spann	Sumter
W. S. Smith (colored)	Sumter
H. M. Stuckey	Sumter
I. M. Woodham	Stokes Bridge

UNION COUNTY.

P. P. Butler	Santuc
M. W. Culp	Union
A. E. Faut	Santuc
J. E. Garner	Mount Joy
J. G. Going	Union
J. H. Hamilton	Union
J. A. Hancock	Carlisle
W. M. Meador	Union
D. H. Montgomery	Lockhart
W. W. Sims	Goshen
M. T. Smith	Union
John P. Thomas	Santuc
L. J. Wood	Kelton
K. M. Littlejohn	Jonesville
S. S. Linder	Union
J. M. Lawson	Union
Y. L. Pool	X Keys
W. O. Southard	Jonesville

YORK COUNTY.

R. Andral Bratton	Yorkville
W. G. White	Yorkville
M. J. Walker	Yorkville
J. W. McDowell	Yorkville
T. R. Carothers	Yorkville
T. A. Crawford	Rock Hill
T. L. Cornwell	Rock Hill

Name.	Postoffice.
Wm. G. Stevens	Rock Hill
J. E. Massey	Rock Hill
A. F. Alexander	Fort Mill
T. S. Kirkpatrick	Fort Mill
Isaac A. Bigger	Point
T. W. Campbell	Clay Hill
J. M. Caldwell	Clarks Fork
J. W. Campbell	Clover
E. W. Pressley	Clover
T. N. Dulin	Bethel
J. P. Hambright	Smyrna
W. D. Hope	Hoodtown
W. A. Hood	Hoodtown
T. B. Hough	Fodder
W. M. Love	McConnellsville
E. G. Murphy	Leslies
J. H. Saye	Sharon
A. G. Little	Ebenezer
T. S. R. Ward	Hickory
D. T. Teal	Hickory
W. W. Fennell	Rock Hill
T. B. Meacham	Fort Mill
T. J. Orr	Leslie

HEALTH REPORT CITY OF FLORENCE.

Florence, S. C., January 2, 1899.

Dr. James Evans, Secretary State Board of Health, Florence, S. C.

Dear Sir: I have the honor to herewith transmit to you this my third annual report, January 1st to December 31st, 1898, as required by Section 9 of an act of the General Assembly of South Carolina of 1894, entitled "An act to establish local Boards of Health," etc.

According to law, in May of this year, before the expiration of the term of Mr. J. J. Brown as a member of this Board, his Honor the Mayor, W. H. Day, Esq., upon the suggestion of the Board, which was requested by the Mayor, reappointed me to serve for the term of five years, from May 24th, 1898.

The new Board met on May 24th, and after having taken the oath prescribed proceeded to organization.

The following is a list of the members and terms they are to serve, from May 24th, 1898: Mr. C. D. Bristow, 5 years; Mr. J. J. Brown, 4 years; Dr. Wm. Ilderton, 3 years; Dr. F. P. Covington, 2 years; Mr. R. C. Commander, 1 year.

Dr. F. P. Covington was elected President. Henry H. Husbands was re-elected Secretary and Health Officer.

The following committees were then appointed:

Committee on School Buildings and Grounds—Dr. F. P. Covington, chairman; Dr. Wm. Ilderton, Mr. R. C. Commander.

Committee on Court House, Jail and Other Public Buildings—Dr. Wm. Ilderton, chairman; Dr. F. P. Covington, Mr. J. J. Brown.

Committee on Rules and Regulations—Mr. C. D. Bristow, chairman; Mr. J. J. Brown, Mr. R. C. Commander.

The Board has held regular meetings each month, all of which have been to the pleasure of the members and the betterment of the health of the city in general.

During the year the several committees have visited the schools, court house and jail, and have reported from time to time the needs of those buildings as to sanitary arrangements, and upon the request of this Board such needs have been attended to by the proper persons who have them in charge, except as to the erection of separate and distinct water closets for males and females at the Florence County prison.

This is one matter that demands attention from the State Board of Health, and should be brought to the attention of the approaching session of the General Assembly. This Board would have long since had this matter attended to, but under the present law they are pow-

erless, as there is no chance of compelling the proper officer to have the matter attended to, as there is no fine laid down for failure of an officer to comply with the request of the Board.

Owing to the existence of smallpox in the upper and middle section of the State last January, the Board of Health held a meeting for the purpose of consulting whether or not it would be best to order a general vaccination of the citizens of Florence.

The Board deemed it best, instead of ordering compulsory vaccination, to simply request the citizens to be vaccinated at the earliest possible moment for fear of this dread disease getting within our limits, which, if not done, then a compulsory vaccination would be established.

The City Council was petitioned by the Board to arrange for the prompt erection of a pest house, should one be needed, and to provide means for the vaccination of our people, should the Board establish compulsory vaccination. These requests were promptly granted by City Council and arrangements made for the carrying out of the requests, but up to the present time the Board is thankful to report that it has not been needed.

The City Council did furnish vaccine virus to the Board for the vaccination (free) of all who came forward to have same done, and Dr. P. B. Bacot, a practicing physician of the city, was employed to vaccinate all who so desired. His services were not needed for more than one week, as there were few who came of their own accord for vaccination. Only 16, of which 2 were whites and 14 colored, were vaccinated.

At the request of the Board, however, there were about 1,000 of our people who were vaccinated by the physicians of the city.

On May 12th, the Health Officer received a telegraphic message from the Mayor of Timmonsville, stating that a negro tramp, who escaped from the pest house in Columbia, had passed through that place, coming this way. Guards were stationed at the city limits, with instructions not to allow him to enter the city. He was intercepted and sheltered near the city and isolated. It was afterward found that he had no symptoms of the disease, and after detention for three days he was released.

The following is the official notice to the citizens from the Board as to vaccination:

CIRCULAR A.

Office of Board of Health,
City of Florence, S. C., January 27.

To the Citizens of Florence:

The Board of Health of this city notes that smallpox is still spreading in this State, and they insist that everybody should be vaccinated as early as possible.

The Board of Health, by and with consent of the City Council, have now provided for the people to be vaccinated at a nominal cost, and the services of a physician have been secured to do the work.

The physician will be at the office of the Health Officer in the city hall building, up stairs, between the hours of 9 and 12 A. M., to vaccinate colored people, and from 3 to 6 P. M. to vaccinate white people.

Those who are unable to pay the nominal sum charged will be vaccinated free. See to it that you are vaccinated at once.

Done by order of the Board of Health,

HENRY H. HUSBANDS,
Health Officer, City of Florence.

In August, the following amendment to the rules of this Board, with the consent of the City Council, were adopted:

An Ordinance to amend the rules of the Board of Health of the City of Florence.

Rule 18.—Section 1. That beginning with the session of 1898-99 and every year thereafter, it shall be unlawful for any pupil to attend, or to be enrolled, in the public schools in the city of Florence, unless he, she or they shall have been successfully vaccinated within a period of five years immediately preceding such enrollment, in said schools, or shall produce a physician's certificate showing that such person is immune, that each pupil be, and he or she is hereby, required to furnish to the superintendent of said schools on or before the day of their enrollment, a physician's certificate or other satisfactory evidence, showing that said pupil has been vaccinated as required herein.

That the superintendent of said schools be, and he is hereby, held responsible for the enrollment or entering of any such pupil who has not been vaccinated as required herein.

For violation of this rule and upon conviction in the municipal court, the superintendent shall be punished by a fine of not more than 10 dollars, or imprisonment for not more than 10 days for each offense.

Section 2. All ordinances or parts of ordinances inconsistent with this ordinance be, and the same are hereby, repealed.

Adopted by Florence Board of Health June 27th, 1898.

Circular A and Circular B, which are contained in this report, are the only publications of the Board for the year.

Circular B.

Office of Secretary and Health Officer,
Board of Health, Florence, S. C.

To the Citizens:

Your attention is hereby called to some of the more important rules of this Board, all of which you are requested to comply with in detail. The Health Officer has the right at any and all times to inspect any premises in the city, and to order such matters remedied as in his judgment may injure the health of any of the citizens. Any person refusing or neglecting to remedy such matters as he may direct, will be prosecuted. Any person who allows any dead fowl, cat, dog or other animal to remain upon his or her premises for a longer time than 24 hours, shall be prosecuted. All privies must be provided with boxes, buckets or tubs, under the seat, for the reception of deposits, and said boxes, buckets or tubs shall only be emptied by the sanitary hands once each month. Dry earth, ashes or lime, must be kept in each privy, and all deposits must be sufficiently covered with dry earth, ashes or lime so that the odor will not arise therefrom. This must be done at least once each day. For failure or neglect to do so, the fine is from one dollar to ten dollars or one to ten days imprisonment. Be sure and see to it therefore that this rule is complied with.

You are forbidden to place or allow to be placed into any sink, pit, pipe, or pump, trough leading to the street drain, or ditches of the city, any foul water, slop, hominy washings, waste matter or dish washings. All gutters, sinks, pits, pipes and drains must be kept clean and disinfected. You are particularly notified that you are forbidden from placing in the streets, alleys or ways, or in the gutters, drains or ditches, or upon any of the public grounds of the city, any yard sweepings, yard cleanings, paper, rags, tree limbs, rubbish or trash, dead fowls, cats, dogs, or other animals, except the same can be put out in boxes or barrels, which must be set on the outer edge of the sidewalk (so that the drains will not be obstructed) accessible for removement by the street carts. Trash of no kinds will be al-

lowed placed in the street. The finding of the same in front or by the side of your premises will be evidence against you.

It is unlawful to keep or maintain any pig or pigs, hog or hogs within the city limits (unless they are kept within an open lot of not less than (2) two acres in size.)

The burying of any dead animal or privy deposit upon your premises is a violation of the law.

All births and deaths must be reported to the Health Officer within ten days. For violation of any of the above rules or regulations, the fines are from $1 to $40, or from 1 to 30 days imprisonment. See to it then that the Health Rules are complied with, and save being reported for a violation.

If at any time you have anything to report or complain of, call on the Health Officer and he will promptly attend to same. My office is on second floor city hall building. Your hearty co-operation with the Board of Health in complying with these rules will enable the Board to make this one of the cleanest and best sanitary regulated cities in the State.

Very respectfully,

HENRY H. HUSBANDS,
Health Officer.

The monthly condensed statement of the mortality has been forwarded to you regularly.

In conclusion, I wish to say that, so fas as the sanitary condition of the city of Florence is concerned, it was never better, and the health of our people, as a whole, is far above any previous year since the formation of this Board.

There were very few cases of sickness from malaria or brought about by local causes.

Thanking you for courtesies shown this Board and its Secretary and Health Officer during the past year.

All of which is most respectfully submitted for the earnest consideration of the State Board of Health.

Yours very respectfully,

HENRY H. HUSBANDS,
Secretary and Health Officer Florence Board of Health.

HEALTH REPORT CITY OF SUMTER.

Sumter, S. C., December 31st, 1898.

Dr. James Evans, Secretary State Board of Health, Florence, S. C.

Dear Sir: During the year 1898, the Board of Health of the city of Sumter had to contend with an outbreak of smallpox which was promptly "stamped out." Compulsory vaccination was ordered and enforced as soon as the first case made its appearance. Infected persons were isolated, and all exposed to the disease were quarantined and vaccinated. A smallpox hospital was built and a camp of detention established. In the hospital were placed all the cases of smallpox, and at the camp of detention all "suspects," except in cases where parties paid for their guards and all other expenses, when they were permitted to remain in their homes within the city. All infected houses, clothing, bedding and household effects were disinfected by health officers. The Board of Health was divided into working committees as follows:

S. C. Baker, M. D., President and Administrative Officer; W. M. Graham and D. W. Cuttino, Committee on Commissary supplies; H. M. Stuckey, M. D., Committee on Quarantine; Geo. D. Shore, Committee on Camp of Detention and Furniture, etc. Health Officer E. I. Reardon, as Executive Officer and Committee on Disinfecting and Vaccination. A. C. Dick, M. D., was appointed special attendant for smallpox cases, and had medical control of hospital. J. A. Clifton, Jr., M. D., had charge of camp of detention, and also assisted the Health Officer in house to house inspection and vaccination. The city was divided into districts for vaccination, and the physicians of the city of Sumter were assigned to different districts, and assisted by the police and Health Officer in enforcing vaccination.

Dr. Wertenbaker, U. S. M. H. Expert, came to Sumter and diagnosed the disease as smallpox, and gave valuable instructions to Board of Health to aid in checking the spread of the disease. City Council met and promptly appropriated the cash for use of Board of Health. Mayor H. F. Wilson and his Board of Aldermen heartily co-operated with department of health.

Five thousand two hundred people were vaccinated. There were six white and thirty-one colored cases; total thirty-seven cases. There were sixty "suspects" in all. All of the white and one colored case paid for their guards, and remained in their homes. All school children and teachers were vaccinated first.

The cost of the outbreak to the city of Sumter was $2,213.49, as follows:

Buildings, rent, lumber, tents, etc	$335 75
Physicians	430 85
Medicines and disinfectants	101 95
Guards and attendants	242 25
Vaccination and vaccine virus	676 30
Supplies, groceries, cots, furniture, labor and incidental expenses	426 39
Total	$2,213 49

Formaldehyde gas, roll sulphur, and bichloride of mercury were the principal disinfactants used. Dr. S. C. Baker, President, and Dr. H. M. Stuckey, a member of the Board, rendered excellent service and gave much of their valuable time free to the city of Sumter.

With the exception of smallpox, there was no serious contagious disease in the city of Sumter in 1898. Diphtheria and scarlet fever were unknown; measles and whooping cough were prevalent in a mild form. As usual cases of fever decreased this year as in former years, since the splendid system of pure water has been introduced.

The sanitary condition of the city of Sumter continues to improve. The Board of Health consisting of S. C. Baker, M. D., President; H. M. Stuckey, M. D., Geo. D. Shore, William M. Graham and D. W. Cuttino, are much interested in this work, and strive to keep Sumter in a clean and healthy condition. All contagious and infectious disease are looked after and houses disinfected afterwards. Our death rate is considerably less than preceding years, despite the increase in population, and our birth rate is much higher than any preceding year.

The City Council co-operate with the Board of Health heartily.

The county jail recently built and of modern construction is kept in clean and first class sanitary condition—heat, light, ventilation, plumbing, diet of prisoners, and quarters, all that can be desired. I inspect the jail monthly, and the prisoners health is good, and they seem pleased with their treatment. School buildings are also kept at their usual first class sanitary condition, and are inspected by health officer frequently. Court house is in good shape.

E. I. Reardon,
Secretary and Health Officer.

HEALTH REPORT CITY OF GREENVILLE.

Greenville, S. C., January 5, 1899.

James Evans, M. D., Secretary State Board of Health, Florence, S. C.

Dear Sir: We have to report no unusual death rate during the year 1898. The death rate, in fact, has been low, the total number of recorded deaths being 125, out of a popualtion of 13,000.

We have had no epidemics during the year, except one of smallpox last winter, and epidemic influenza, or "La Grippe," which is now so widely prevalent in this country.

In the epidemic of smallpox last winter there were 37 cases, 31 of these being colored and 6 white—adults 33, children 4; death 1.

As will be seen from the above the disease was confined almost entirely to the colored population, and was so exceedingly mild that only one death occurred from it. The first case was that of a negro man who had recently come from Atlanta, Ga.

A good many negroes had been exposed to the disease before it was discovered and diagnosed as smallpox, but the city council and Board of Health acted with commendable energy in establishing a pest house, and by isolating the cases as soon as discovered, the disease was soon stamped out.

During the month of December "La Grippe" has prevailed to a considerable extent, but very few cases have been fatal.

Typhoid fever has been rare during the year, and there have been very few cases of diphtheria, scarlet fever or any other contagious diseases.

We can but attribute this freedom from such diseases to the purity and abundance of our water supply (1,000,000 per day), our unsurpassed system of sewerage and splendid surface drainage. The altitude of the city (nearly 1,200 feet), with the proximity of the mountains, insures us against malarial diseases.

Respectfully submitted.

C. A. SIMPSON,
Secretary.

HEALTH REPORT TOWN OF CLOVER.

Clover, S. C., January 5, 1899.

To Dr. James Evans, Secretary State Board of Health, Florence, S. C.

I have not at hand the material necessary for ascertaining the mortuary statistics for the past year. In accordance with the State law,

this town is provided with a local Board of Health, composed of the following parties: E. W. Pressly, M. D., chairman; John J. Smith, secretary; Z. Carroll, John Knox, and Perry Diver. Meetings of the local Board have been held at intervals and the health officer has been faithful in his periodical inspections of the town.

The town has fairly good surface drainage; is situated near the foot of King's Mountain, and is free at all times from malarial influences.

During the past year the health of the town has been exceptionally fine. There has been no epidemic of any kind within the incorporation during the year. Early in May, one case, diagnosed as variola by Dr. J. W. Campbell, of this place, was found one mile east of this point. Vaccination and isolation were enforced, and only one other case subsequently developed.

Yours truly,

E. W. Pressly,
Chairman Board of Health Clover, S. C.

IN MEMORIAM.

Dr. J. RUFUS BRATTON.

Dr. J. Rufus Bratton was born November 12th, 1821, at Brattonsville, the old Revolutionary scene of Houck's defeat and death, and the beginning of American Independence. Dr. Bratton died at his home in Yorkville, September 1st, 1897, in his 76th year, after a few days' illness.

His academic education was received at Mt. Zion College, Winnsboro, S. C., then conducted by that fine scholar and teacher, J. W. Hudson. He graduated from the South Carolina College in the class of 1843. In March, 1845, he graduated in medicine from the South Carolina Medical College. After practicing medicine a year, he took a full course in the Hospital of the University of Pennsylvania.

In 1850, he married Miss Rebecca Massey, of Lancaster District, and to them seven children were born, five sons and two daughters.

He began practicing in Yorkville immediately after graduating. At the first call for volunteers, he entered the army as Assistant Surgeon, with the Fifth South Carolina Regiment of infantry. For some time he was in charge of the fourth division of Winder Hospital, in Richmond, for which he received recognition and promotion to full Surgeon. Failing in health, he asked for lighter duties, and was sent to Milledgeville, Ga.

During the last days of the Confederacy, being at home on furlough and awaiting orders, he opened his doors to President Davis and his Cabinet on their retreat from Charlotte, N. C., to Washington, Ga., regardless of the danger from pursuing Federals, which others in the town feared, and therefore refused them admittance to their homes. When reminded of the danger, he replied: "I have been in it from the beginning, and am still willing to take my share of the last bitter drop."

Owing to the Kuklux excitement and the United States martial law, he had to leave his home for parts unknown in 1871, remaining in Alabama nearly a year among his South Carolina friends. But hearing of danger, he fled to Canada. His family received a letter from him stating that at last he felt safe from further worry, being among the Mazycks, Manigaults and other friends who had gone from South Carolina, and also with his new friends and brother Masons. A few days after, news reached his family that he had been

kidnapped and was being brought home, which was true. In that day and time the joy to his family and the community at the prospect of his return was overshadowed by the fear of what *might be.* But the English Government would not submit to this high-handed and contemptuous disregard of her power and rights, and instantly demanded his return to her soil. He remained in Canada, enjoying the protection of the Government and the kindness of his friends, besides a lucrative practice in his profession, until the fall of 1878, when he returned to his old home and State, dearer to him than all else.

He became a member of the Executive Committee of the State Board of Health in 1881, and was elected its chairman January 5, 1888, which position he held until his death.

He was elected President of the South Carolina Medical Association in 1891, and served the usual time—one year.

He never aspired to nor held any political position.

In all his domestic relations, he was kind, tender and affectionate.

During his whole career, as physician, citizen, patriot and soldier, he was guided solely by his stern and inflexible sense of duty. His life, therefore, was such "that Nature might stand up and say to all the world, this was a man."

Dr. CHARLES R. TABOR.

Whereas we are called upon to mourn the loss of one of the most prominent members of our board, as well as one of the most active, in the death of Dr. Charles R. Tabor—one whose life added lustre to our State and country, by his superior learning, his professional attainments, his genial manner and his commanding appearance, beloved wherever known, and most keenly missed from the regular meetings of the Board; and while we bow in submission to the will of God, we believe that "He doeth all things well."

Resolved, That in the death of Dr. Charles R. Tabor, late chairman of the Board, we express our grief at his death. His life and his virtues are too well known to need repetition here.

Resolved, That a blank page in our minute book be inscribed to his memory, and that these resolutions be printed in our transactions.

Resolved, That a copy of these resolutions be furnished his family, in token of our sympathy with them in their grievous loss.

REPORT OF COMMITTEE ON ORDINANCE AND SANITARY CODE.

The Committee on Ordinance and Sanitary Code beg leave to report:

The law gives the Board of Health only advisory powers, and gives the municipal authorities the executive powers. Nothing advised can be executed except by ordinance of the town council, so far as the local or sub-boards are concerned, and too frequently there is a conflict. For instance, the Health Board declares that the acts of a certain citizen are offensive or prejudicial to the health of the community, and the council undertake to say that the Health Board "is too scientific," and that there is no danger from his act, thus neutralizing their efforts; and a repetition of these acts dishearten and cause the board's efforts to cease.

It would make this report unnecessarily long should I attempt to even name the sanitary laws which are so well established, as the following:

Purification of drinking water.

The cleaning and drainage of our streets and by-ways.

The prompt removal of human excreta and disinfection generally of homes and dwellings.

The disinfection of sick rooms and the isolation of those sick of contagious diseases.

The necessity of vaccination and revaccination.

The isolation of those sick with scarlet fever, diphtheria and smallpox are too well known not to be heeded by the laity, but emphasis should be laid upon such diseases as whooping cough and measles. The too widespread notion that all children should have these diseases should be combatted and the public shown how such diseases might be "stamped out." Very much has been done recently towards putting a stop to the spread of one of the greatest enemies of the human race—tuberculosis—by establishing its possible contagiousness, and much has been written by scientific writers on this subject.

Now, these are only a few of the well established laws that can and should be pressed upon the public mind and made so plain that "He who runs may read, and the wayfaring man, though a fool, may not err therein."

Respectfully submitted.

W. H. NARDIN, Chairman.

REPORT OF COMMITTEE ON SUB-BOARDS OF HEALTH.

The Committee on Sub-Boards of Health beg leave to report: That it is with much regret that we have to report so much friction between the municipal and the Sub-Board, and are compelled to express our great astonishment at the fact. It is generally admitted by all that "the health of the individual is the wealth of the nation," and upon this purely financial basis it would seem, there would be no disagreement. Sub-Boards of Health are very important factors in the successful workings of the State Board, as upon the completeness of their reports depend the correctness and value of the State Board, and the careless and incorrect measures of the Sub-Boards will render the reports and actions of the State Board unreliable and of no value. They stand in relation to a general and his army—the one commands and the other executes. Hence it becomes important that these Sub-Boards should extend into the townships as well as the towns of the State, and to this end let us strive to secure such legislation as is set forth in a bill now before the legislature, "to create township boards," and when all branches of this army shall well and truly perform all its functions, then, in the language of our Secretary, "the State Boards of Health of South Carolina will be second to none in the United States."

Respectfully submitted.

W. H. NARDIN, Chairman.

REPORT OF COMMITTEE ON SANITARY REGULATION OF SCHOOLS.

Mr. Chairman:

We of this committee find ourselves in the position of pioneers who undertake to open up new and important enterprises in hitherto unmarked fields—for, in looking through the past records of the State Board of Health, as far as we could, we have been able to find no precedent to show us what our duties are. Little that is practical appears to have been done along the lines upon which you have asked us to work. Yet surely there is nothing of greater moment to the future interests of our Commonwealth than the physical care of her children, by which means chiefly may we have to raise up a vigorous generation of citizens and mothers of citizens, and "subdue them to the useful and the good."

According to the figures of last year, there are 119,027 white and 139,156 colored children attending school in South Carolina. There are 2,423 school houses for white and 1,766 school houses for colored children. We have been able to obtain no data whatever regarding the sanitary conditions of these schools, nor concerning the prevalence of infectious diseases among the children—a lamentable evidence of lack of proper organization.

Here, then, lies our first duty. An organized effort must be made by the State Board of Health to obtain information regarding these matters, without which we are powerless to accomplish much. We suggest the issuance to town and county Superintendents of Education of printed questions concerning the average attendance at their schools, the size and ventilation of the buildings, and especially regarding the water supply—whether the latter be from wells or springs or rivers, and distance from privies or other sources of dangerous contamination.

All teachers should be required to report to the town or county Boards of Health all cases of infectious diseases occurring among their children. These sub-boards should in turn report their data to the State Board, and should be empowered to take such action as may be necessary to prevent the further spread of the disease.

In parts remote from the larger centers we can doubtless ac-

complish little—perhaps nothing; but this should not deter us from exerting ourselves to do what good we may. Persistent working for a good end must always yield some fruit. But when we have done all this we have only made a beginning. To reap the full fruition of our efforts we must seek the intelligent co-operation of educated teachers. To the end of insuring this educated assistance we urgently recommend that the chairman of the State Board of Health appoint whomsoever he may deem fit for the purpose of discussing before the teachers at the annual meetings of their institutes, questions pertaining to hygiene, such as the modern theory of infectious diseases; the modes of spread and the measures to be adopted for their prevention; the effects of eye-strain; the effects of wrong posture, etc.

If sanitary regulations of schools includes, as we think it does, all things relating to the health of school children, we should not allow false ideas of propriety to veil the importance of a free and bold discussion before women teachers of the pernicious influence of exposure, mental overwork, and undue worry upon the menstrual functions of young girls, and the baneful consequences attending disturbances of this delicately poised mechanism. We believe that the encouragement given by ignorant teachers to severe competition for marks and prizes cannot fail to result in much ill health and unhappiness.

Lectures and addresses, however, will not suffice to keep continually before the minds of teachers the importance of proper sanitary measures. Bulletins or leaflets should be published and distributed at least quarterly, giving practical information concerning the precautions necessary for preventing the communication of infectious diseases, and other matters of more or less direct sanitary value.

We need not dwell upon the importance of gathering statistics and doing what we can to improve the sanitary conditions of our school houses, but we wish to lay especial emphasis upon this duty of teaching, so often overlooked. The chairman of this committee has been himself a school teacher, and profoundly realizes the far-reaching good that may be done by carrying sanitary knowledge to the members of that profession. How

can they know unless they be taught? And how can they be taught save by those sent with power and authority to teach?

We think these things are our legitimate function, and surely we can do no better and no higher work than this, of aggressively undertaking the diffusion of accurate knowledge among those whose daily duties give them so potent an influence for good or evil upon the physical organization as well as upon the mental and moral constitution of the future manhood and womanhood of our State.

Respectfully submitted.

ROBT. WILSON, JR., M. D., Chairman.

QUARANTINE REPORTS.

PORT OF CHARLESTON.

City of Charleston, S. C.,
Department of Health,
December 20, 1898.

To Dr. C. M. Rees, Chairman Quarantine Committee, State Board of Health South Carolina.

Dear Doctor: I beg to acknowledge the receipt this day of your note, asking for the quarantine report of Charleston Harbor for the year 1898.

In reply, I beg to state that the United States Cruiser S. S. Woodberry arrived at the Quarantine Station August 19, with a case of yellow fever. The vessel was immediately sent to Sapelo Refuge Quarantine Station.

There were no other cases of contagious or infectious disease coming to the Fort Johnson Quarantine Station during this year 1898.

One case deemed suspicious came to the station on the United States transport Minnewaska September 9. The case developed other than yellow fever.

The freedom from yellow fever arrivals is remarkable, in consideration of the many vessels of the United States Navy, engaged in the late war with the Kingdom of Spain, coming from the West Indies, where yellow fever has been extensively prevalent.

The utmost caution and care was exercised during the entire summer as to arrivals, and the rules and regulations governing the port of Charleston were carefully and thoroughly carried out by Dr. Lebby, the competent and zealous Quarantine Officer of the Fort Johnson Quarantine Station.

The Quarantine Station is directly under the control and management of the Maritine Sanitation Committee of the Board of Health of Charleston. This committee, consisting of Mr. Hall T. McGee, Chairman, Messrs. A. S. Smith and Waring

P. Covington, and Drs. C. W. Kollock and H. B. Horlbeck, have been entirely alive to the very great interests involved during the past summer months. This committee have been constantly supervising the work at the station, and have given close attention personally to all the great requirements demanded. All vessels arriving from suspected (and especially from infected) ports have been thoroughly disinfected and detained the five days limit required by the rules and regulations of the Board of Health.

The station is thoroughly equipped with every mechanical appliance and device for complete disinfection and scientific cleansing, and the plant is kept in order for work at any hour in any month, night and day, with proper and efficient employees to carry out all orders extended.

The wharves for carrying out disinfection, and also for the removal of ballast, have been thoroughly overhauled during the summer and put in complete order, new piles being driven where wanted and new planking put down.

The different buildings are all kept up in first-class repair.

This station is of greatly augmented importance on account of the result of the war with Spain giving the control of the islands of Cuba and Porto Rico to the United States. On account of the geographical situation of Charleston and its contiguity to these islands, and its capacious and convenient harbor, we must expect eonstant and frequent arrivals from the West Indies; it must inevitably be our duty to protect the people of the United States against the importation of disease, especially yellow fever.*

The importance of this port for full quarantine efficiency, is therefore called to your careful attention for constant sustainment; so that the fullest service may be rendered with the least practical delay.

Respectfully submitted.

H. B. HORLBECK, M. D.,
Health Officer and Secretary of Board of Health.

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*There were thirty-nine arrivals direct from the West Indies during the year 1898 at the quarantine station of Charleston Harbor.

Table of Arrivals at Quarantine, Charleston, S. C., from January 1, 1898, to December 21, 1898.

	Months.	Total in Each Month.	Steamships.	Barks.	Schooners.	Total Fumigated.
.....	January	13	9	1	3	1
.....	February.....	12	6	3	3	....
1 tug	March.....	12	3	4	....	....
1 tug, 2 yachts.....	April.....	11	9	....	2	....
.....	May.....	9	6	1	2	2
.....	June.....	8	5	1	2	....
1 steam yacht.....	July.....	15	12	....	3	6
3 steamships, 10 U. S. cruisers, 2 steam yachts, 4 torpedo boats, 1 monitor.....	*August.....	20	20	....	....	1
2 monitors, 1 cruiser, 2 gun boats, 1 transport, 1 collier, 8 steamships.....	September....	16	15	1	....	5
14 steamships, 3 cruisers.....	October	20	17	2	1	....
8 steamships, 2 tugs.....	November	12	10	1	1	....
.....	December.....	19	12	‡2	4	....
	Total.....	167	129	17	21	15

*U. S. cruiser Woodbury, 1 case of yellow fever: ordered to U. S. Refugee Quarantine Station, Sapelo. ‡1 Brig.

From Suspected or Infected Ports.

	Direct.	Indirect.
West Indies	39	2
South America.....	5	.....
Central America.....	11	.....
Progresso, Mex.....	.....	1
Total.....	55	3

From healthy ports..... 112
Direct from suspected or infected ports..... 55

Total..... 167

127 arrivals in 1897.

H. B. Horlbeck, M. D.,
Health Officer, and Secretary Board of Health of Charleston, S. C.

PORT ROYAL.

Quarantine,
Port Royal Harbor, S. C., Dec. 24, 1898.

Dr. H. M. Stuart, Chairman Beaufort Township Board of Health,
Beaufort, S. C.

Sir: Herewith I beg to hand you a yearly report of vessels arriving at Quarantine, Port Royal, S. C., for 1898.

Beside these, as per statement, I have inspected several others, *i. e.*, United States Auxiliary Cruisers entering this harbor for coaling and repairs at United States Naval Station located on this island. Santiago, Guantinamo, Havana and Key West, Fla., were the principal ports from which they came. There were several of these cruisers without surgeons on board, two of which vessels I detained for several days, as some of their crew had fever, which proved malarial.

The Spanish-American war now being over, commerce will improve with Cuba, Port Rico and other islands of the south, now under our Government's protection, and vigilance of our quarantine regulations must be increased and enforced during the coming year, to protect our people from yellow fever and other infectious diseases so prevalent in those latitudes.

Buildings, Wharves, Etc.—These have been much damaged this past season by the two severe cyclones which swept our coast. The Health Officer's residence was partially unroofed, causing much damage to the interior from rain. The wharf was nearly entirely destroyed by the inundation during the storm. The privy and much fencing were also swept away.

I would respectfully request your Board to so place the condition of this station before our Representatives of our county, co-operating with the State Board of Health, that the coming Legislature will be asked and they make an appropriation for needed repairs.

I am, dear sir, very truly,

W. P. GIBBES, M. D., Health Officer.

Vessels Arriving at Quarantine, Port Royal, S. C., from January 1st, 1898, to December 31st, 1898.

From Domestic Ports:		
New York	3	
Philadelphia	1	
Charleston	1	
New Orleans	1	
	—	6
From Foreign Ports:		
Hamburg	2	
Porto Prai	1	
South Shields	1	
Liverpool	1	
Dundee	1	
Cardiff, Isle du Salut (Fr. Guiana)	2	
Antwerp	2	
Huelva (Spain)	1	
Hull	1	
Bristol	1	
North Shields	1	
	—	15
Total		21

W. P. GIBBES, M. D.,
Health Officer.

PORT OF BEAUFORT.

Beaufort, S. C., December 23, 1898.

To the Chairman and Members of the State Board of Health, Columbia, S. C.

Gentlemen: Please allow me to present to you the report of the officers in charge of the two quarantine stations of Port Royal and St. Helena.

There is no necessity to take up more of your time in reviewing these reports, but it is necessary for me to call your attention

to the fact that both of these stations were very much damaged by the two storms which visited our coast. The phenomenally high tides and the deluge of rain, accompanied with the terrible velocity of the wind, damaged both of these stations considerably, and it will require at least an appropriation of four hundred dollars, to be divided equally between the two stations, to replace what has been destroyed. This is an economical calculation, and would not be enough unless the two officers personally superintended the expenditure of the money.

I respectfully beg that you will lend your aid in securing the above appropriation.

Respectfully submitted.

H. M. STUART, M. D.,
Chairman Township Board of Health, Beaufort Township.

PORT OF GEORGETOWN.

Port of Georgetown, S. C., December 5th, 1898.

To Dr. T. Grange Simons, President and Member State Board of Health.

Sir: I am pleased to report that the port of Georgetown, S. C., has been exempt from an invasion of yellow fever and all other infectious diseases during the year 1898.

The war with Spain, no doubt, has materially lessened the arrival of vessels from foreign ports, notably those from the West Indies, whence formerly the majority of foreign vessels cleared for Georgetown, S. C. All vessels from American ports have complied with the quarantine regulations. I trust our State Legislature will enact a law to provide for compulsory vaccination for the county, as the cities thus protect their inhabitants, leaving the rural districts unprovided for. Malarial hæmaturia continues to number its victims by the hundreds. This disease, though not contagious, is equally as fatal as yellow fever. I trust the Legislature will amply provide an appropriation, and devise a plan that this disease will be stamped out of existence in our fair, noble old State.

Very respectfully,

J. WM. FOLK, M. D.,
Quarantine Officer Port of Georgetown, S. C.

ST. HELENA QUARANTINE STATION.

St. Helena Quarantine Station, December 24th, 1898.

Dr. H. M. Stuart, Chairman Township Board of Health.

Dear Sir: I herewith have the honor of presenting to you my report for the current year.

Our station has been comparatively free from serious sickness throughout the year. Vessels arriving at this port have been altogether free from contagious or infectious diseases.

From excessive rains during the latter part of the summer, the neighboring islands have suffered unusually from malarial fevers, with rather a large percentage of fatal cases among the negro population.

We have been unfortunately visited this year by two severe cyclones. That of August the 30th was of fearful force, accompanied by an irresistible inwash of water, which totally submerged the islands, leaving only the buildings above water, from which the hospital was damaged somewhat. But I regret to state that this was not the only loss to the station. The wharf and plankway across the marsh leading to the same could not stand the ordeal. The wharf was swept away and the plankway wrecked.

In this connection I would suggest to you the immediate necessity for an appropriation of two hundred dollars ($200) by the State to replace this loss, estimate based upon previous cost of this work

Arrivals of vessels at this port since February 1st to date were as follows:

January 2d—Schooner E. T. Hight, from Baltimore, Md.
January 2d—Schooner F. O. Cason, from Baltimore, Md.
January 4th—Schooner A. S. Brown, from Baltimore, Md.
February 24th—Steamship Christon, from Carimanbo.
May 30—Steamship Beechminster, W. Hartlepool, England.
July 19—Steamship Bridesmaid, Genoa, Spain.
August 14—Barque Hadden Hall, Liverpool, England.
August 16—Steamship Obendana, Hampton Roads, Virginia.
December 2—Steamship Cosmopolitan, Norfolk, Virginia.

FINANCIAL STATEMENT.

January 1.	Cash on hand	$149	13	
	Fees from ships to date	86	00	
	For account boat hire to date	112	50	
	Paid boat hand to date			$240 00
	Paid boat hire to date			112 50
	Paid 2 cords wood			4 00
	To balance	8	87	
		$356	50	$356 50

You will observe that the above statement shows a deficit of $8.87 for the year, which I have temporarily assumed. You will readily see that it is urgently necessary that some provision should be made, at least for paying two boat hands for the coming year. The small fees obtained from vessels is altogether inadequate. This matter is of so much importance, in consideration of the isolation of this station, that I would respectfully request your personal influence with the State Board of Health for assistance as indicated.

Respectfully submitted.

M. M. SAMS, M. D., Q. O.

EXPENDITURES BY STATE BOARD OF HEALTH OF EMERGENCY FUND FOR CONTROL OF EPIDEMIC DISEASES.

Feb.	3.	For telegraphing for smallpox, paid to O'Driscol, Charleston, S. C	$4 26
	3.	For telegrams for smallpox, paid to W. T. Heard	19 85
	21.	Dr. A. M. Stuart, for services as an expert to Orangeburg on smallpox	89 75
	23.	To health department city of New York, for vaccine tubes	13 00
	23.	Dr. H. M. Alexander, Marietta, Tenn., for vaccine points	22 02
	23.	Dr. Frances C. Martin, Boston, for vaccine points	40 00
	23.	Exchange on New York	30
	24.	Dr. W. W. Wolfe, for vaccine and vaccinating, establishing quarantine at Fort Motte and quarantining	59 00
	24.	Dr. C. R. Taber, Fort Motte, S. C., for vaccine points	10 00
	24.	Dr. C. R. Taber, Fort Motte, S. C., for vaccinating 100 persons	25 00
Mar.	5.	C. F. Panknin, Charleston, S. C., for formaldehyde lamp, $5, and solution, $1; express to Greer's, to Dr. J. A. White, 50c..	6 50
	5.	Dr. B. S. Kittles, Yemassee, S. C., for attendance on two cases of smallpox, $20; for vaccinating 1,472 persons, $147.20...	167 20
	5.	Western Union Telegraph Co., for telegrams for smallpox	5 15
	21.	John Graham, Sr., Sheldon, S. C., for groceries furnished Mitchel's family	11 15
March	21.	G. G. Martin, for payment of guard at Sheldon, S. C	37 50

	21.	Henry M. Fuller, for paying two guards at Sheldon, $35; for replacing clothing burned, $30.....	65 00
	21.	Health department city of New York	6 50
	21.	Dr. Andrew Wallace, for expenses and fee for visiting patient at Laurens, S. C.....	56 50
	21.	Dr. Peter Bacot, pay as inspector at Pelham	25 00
	22.	Dr. L. J. Blake, for guards, 2 for 15 days, at Arkwright Mills, Spartanburg.....	28 00
	21.	To Dr. Jas. Evans, expenses to Columbia, on account of smallpox, on January 26, February 1 and 16, and March 16.....	113 60
April	6.	W. D. Harrington, for guarding and quarantining Cole family, near Hartsville, Darlington County, 52 days	52 00
	6.	Dr. J. A. White, Pelham Mills, for attendance on cases of smallpox for 31 days, $62.00; vaccinating 235 persons, $23.50.	85 50
	6.	Dr. A. T. Hydrick, for going to Fort Motte, and services, January 25, to see smallpox cases	25 00
	6.	Western Union Telegraph Company, for telegrams for smallpox, month of March	16 71
	9.	To Dr. J. A. White, Pelham Mills, for vaccinating 211 persons.....	21 15
	28.	To Dr. H. B. Horlbeck, Charleston, for 1150 Alexander's points.....	57 50
	28.	Health Department of New York, for 300 vaccine tubes, for Dr. Bacot, Pelham Mills.....	19 50
	28.	News and Courier, for 100 copies of quarantine rules of Atlanta convention.....	5 00
April	28.	H. E. Heintish, for drugs and vaccine, Arkwright Mills.....	16 69
	29.	For guards at Arkwright, $22; at Glendale, $86 (from March 8 to April 20).....	108 00
	29.	Dr. Wilson, for attendance at Arkwright Mills (March 8 to April 30), $82; for vaccinating 23 persons, $2.30.....	84 30

	29.	Dr. W. A. Smith, for attending smallpox cases at Glendale.....	32 00
May	5.	Western Union Telegraph Company, for telegrams on smallpox for April.....	7 57
	4.	Dr. James Evans, expenses of trip to Columbia.....	28 40
	9.	Dr. Peter Bacot, for expenses at Pelham Mills.....	25 00
	10.	A. R. Richardson, Pelham Mills, for salary as sanitary inspector for 46 days.....	46 00
	18.	Health Department city of New York for 150 vaccine points.....	9 75
	25.	Dr. W. E. Mealing, for vaccine points at Hamburg, S. C.....	3 50
	25.	Dr. Francis C. Martin, for vaccine points...	5 00
June	11.	Western Union Telegraph Company, for telegrams for May.....	1 99
	23.	Health Department city of New York, for 100 capillary tubes of vaccine.....	6 50
	23.	Pelham Mills, paying and maintaining guards and expenses incurred in maintaining pest home at Pelham.....	440 18
	23.	To News and Courier, for advertising quarantine notice	11 00
	23.	Dr. P. Bacot, for services and expenses at Pelham and Spartanburg, on account of smallpox.....	177 04
	23.	Dr. P. Bacot, for services and expenses at Pelham and Spartanburg.....	34 00
June	23.	Dr. J. A. White, Pelham, for vaccinating 330 persons, $33, and attending pest-house for 14 days at $2 a day, $28.....	$61 00
	30.	To Becky Hall, for nursing Hare family for 8 days.....	8 00
	30.	To Mrs. E. Brandenbaugh, for nursing Hare family for 24 days.....	24 00
	30.	To T. B. Holley, for attending smallpox cases from May 27 to June 26.....	62 00

July	14.	To Dr. P. W. Hite, for attending smallpox cases for 14 days at $2 a day, $28, and vaccinating 642 persons at 10c per head, $64.20	92	20
Aug.	6.	To Dr. Jas. Evans, for expenses to Detroit, Mich., as delegate	50	00
Sept.	5.	To Dr. Jas. Evans, for expenses to Detroit, Mich., as delegate	47	00
Oct.	28.	To expenses to Sumter and Columbia on account of smallpox, and amount paid W. U. Telegraph Co. for telegrams on account of small pox	32	43
			$2,501	22

DR.

To amount from Comptroller General.....$2,500 00

EXPENSES INCURRED BY STATE BOARD OF HEALTH FOR SMALL POX.

Laurens County—For expert treatment of Sloan and vaccination of community	$56 50
Fort Motte—For treatment of two cases, quarantine guards and vaccination	94 00
Orangeburg—For services of Dr. Stewart	114 75
Beaufort—Three cases, vaccination of 1,500, and for medical attendance and guards	243 35
Hartsville—Five cases and vaccination of 68	52 00
Saluda—24 cases and vaccination of several hundred	186 20
Sumter Township—22 cases, 185 vaccinations, expense	375 32
Spartanburg—Arkwright, Glendale, Fair Mount, Switzer, Fair Forest, 63 cases, 1 death; expense	549 42
Pelham Mills—Cases 35, deaths 4, expense	847 78

This is a summary of expenses incurred by the State Board of Health for smallpox. It does not include purchase for virus, telegrams and some other expenses. There is also due Spartanburg unpaid bills, and also Summerton Township about $600.

Expenses incurred by incorporated towns:

Richland County—Outside of city, cases 48, deaths 0	2,004 94
Columbia—Cases 317, deaths 7, expenses of city furnished by Health Board	7,500 00
Spartanburg—Cases about 262, deaths 4, probable expense	2,172 58
Greenville—Cases 37, expense	3,000 00
Sumter City—Cases 37, expense	2,213 49
Orangeburg—Expense smallpox	406 07

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

ANDERSON.

MY DEAR SIR: My prisoners run all the way from one to forty; their diet is good and health excellent. We have new jail, and regular health officer looking after them all the time.

Very respectfully,

NELSON R. GREEN,
Sheriff A. C.

Sanitary Condition of Jails and Court Houses, by Months. for Each County.

BARNWELL.

Months.	Jail.									Court House.		
	General Sanitary Condition.	Number of Persons Confined.				Space Allotted Each (In Cubic Feet).	Number Giving Evidence of Successful Vaccination.	Number Who Can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	Number of Cases of Sickness.	General Sanitary Condition.	Water Closet Regulations, Undetected or Defaced.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
January...	As good as could be under present condition of jail, having to use buckets for slop.	.....	.....	6	.....	Rooms 18 x 18, with sometimes as high as 10 prisoners in one room.	On this question I am unable to answer.	This question I am unable to answer, but would say majority illiterate.	Allowed 1 pk. meal and 2½ lbs. bacon, furnished on requisition made on supervisor; dieting prisoners at so much per day would allow a change of food which I think necessary.	No serious sickness; have had 2 deaths, 1 from gun-shot wound and 1 from insanity.	Offices in court house comfortably arranged, with fire places; court house hall heated by chimneys.	No water closets; being deficient in this respect jury rooms furnished with chambers for use of jury, and long term of court become very offensive.
February..		7	.....	11	.....							
March		1	.....	10	.....							
April.....		3	.....	5	.....							
May		.....	.....	7	2							
June.....		.....	.....	8	.....							
July		1	.....	3	.....							
August....		1	.....	1	.....							
September		.....	.....	6	.....							
October....		1	.....	8	.....							
November.		2	1	13	2							
December.		.....	.....	8	.....							
		16	1	88	4							

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

BEAUFORT.

Months.	Jail.											Court House.	
	General sanitary condition.	Number of persons confined.				Space allotted each (in cubic feet).	Number giving evidence of successful vaccination.	Number who can read and write.	Diet as regards wholesomeness and sufficiency.	Number of cases of sickness.	General sanitary condition.	Water closet recommendation. ample or deficient.
		Male, white.	Female, white.	Male, colored.	Female, colored.							
January	Good	....	....	30	6	10	20	12	Good	4	Good	Deficient
February	Good	....	....	11	....	.....	.....	3	.....	.....	"	"
March	Good	1	....	13	2	.....	.....	7	.....	2	"	"
April	Good	....	....	3	1	.....	.....	.....	.....	.....	"	"
May	Fair	....	....	22	11	.....	.....	12	.....	1	"	"
June	Fair	....	....	9	....	.....	.....	1	.....	.....	"	"
July	Fair	....	....	15	2	.....	.....	3	.....	1	"	"
August	Fair	....	....	18	2	.....	.....	2	.....	1	"	"
September	Fair	1	....	25	3	.....	.....	4	.....	2	"	"
October	Good	....	....	13	....	.....	.....	4	.....	1	"	"
November	Good	....	....	5	....	.....	.....	.....	.....	1	"	"
December	Good	....	....	3	....	.....	.....	.....	.....	1	"	"

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

CHESTERFIELD.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet).	No. Giving Evidence of Successful Vaccination.	No. Who Can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male—White.	Female—White.	Male—Colored.	Female—Colored.							
January	....	....	....	....	....	....	3	....	5	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....
December	Good	2	....	2	....	....	2	....	Good	None	Good	None

Sanitary Condition of Jails and Court Houses, By Months, for Each County.

CLARENDON.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet).	No. Giving Evidence of Successful Vaccination.	No. Who Can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male—White.	Female—White.	Male—Colored.	Female—Colored.							
January	Good	....	....	9	....	....	....	....	Good	None	Good.	Everything is carried out by hand.
February	....	....	....	18	....	....	....	....	....	....	....	
March	....	....	....	17	....	....	....	....	....	....	....	
April	....	....	....	4	....	....	....	....	....	....	....	
May	....	....	....	9	....	....	....	....	....	....	....	
June	....	....	....	5	....	....	....	....	....	....	....	
July	....	....	....	10	....	....	....	....	....	....	....	
August	....	....	....	14	....	....	....	....	....	....	....	
September	....	....	....	8	....	....	....	....	....	....	....	
October	....	....	....	15	1	....	....	....	....	....	....	
November	....	1	....	5	2	....	....	....	....	....	....	
December	....	....	....	8	2	....	....	....	....	....	....	

Mostly negroes, for stealing. Drunkenness causes most crime. We have no sickness; and very poor jail, wooden building, not worth $500.

Sanitary Condition of Jails and Court Houses by Months, for Each County.

DARLINGTON.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet).	No. Giving Evidence of Successful Vaccination.	No. Who Can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male—White.	Female—White.	Male—Colored.	Female—Colored.							
January	Very Good	3	....	28	....	....	.....	....	.....	None	Very Good	Very Good
February	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
March	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
April	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
May	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
June	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
July	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
August	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
September	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
October	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
November	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
December	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....

About an average of 15 to 20 prisoners monthly. General sanitary condition very good.

G. P. SCARBOROUGH,
Sheriff Darlington County.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

FAIRFIELD.

Months.	Jail.										Court House.	
	General Sanitary Condition.	Number of Persons Confined.				Space Allotted Each (in Cubic Feet).	Number Giving Evidence of Successful Vaccination.	Number who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	Number of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
January	13	....	....	....	....	8 x 12	.....	.....	.....	.....	Bad—cesspool slops out in buckets.	Deficient.
February	13	....	....	....	....		.....	.....	.....	.....		
March	.....	....	....	....	....		.....	.....	.....	.....		
April	3	....	....	....	....		.....	.....	.....	.....		
May	3	....	....	....	2		.....	.....	.....	.....		
June	3	....	....	....	....		.....	.....	.....	.....		
July	.....	....	....	....	....		.....	.....	.....	.....		
August	2	....	....	....	....		.....	.....	.....	.....		
September	8	....	....	....	....		.....	.....	.....	.....		
October	1	2	....	....	1		.....	.....	.....	.....		
November	5	....	....	....	....		.....	.....	.....	.....		
December	7	....	....	....	....		.....	1	.....	3		

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

FLORENCE.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet).	No. Giving Evidence of Successful Vaccination.	No. who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male—White.	Female—White.	Male—Colored.	Female—Colored.							
January	Good	22	....	....	....	5.40	15	....	....	1	....	....
February	"	28	....	....	....	4.24	....	....	....	....	....	....
March	"	14	....	....	....	8.48	....	....	....	....	....	....
April	"	17	....	....	....	6.98	....	....	....	1	....	....
May	"	12	....	....	....	9.90	....	....	....	1	....	....
June	"	17	....	....	....	6.98	....	....	....	....	....	....
July	"	16	....	....	....	7.42	....	....	....	2	....	....
August	"	27	....	....	....	4.40	....	....	....	2	....	....
September	"	28	....	....	....	4.24	....	....	....	4	....	....
October	"	23	....	....	....	5.16	....	....	....	1	....	....
November	"	39	....	....	....	3.04	....	....	....	6	....	....
December	"	38	....	....	....	3.04	....	....	....	6	....	....

Sufficient diet: 2 meals per day; sufficient in quantity.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

GREENWOOD.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet).	No. Giving Evidence of Successful Vaccination.	No. who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male—White.	Female—White.	Male—Colored.	Female—Colored.							
January	Good	....	....	10	....	Cells, 7 square feet; 4 to the cell.	.....	1	Corn Bread, Bacon, Molasses, Peas, Turnips and sometimes Buttermilk.	.....	Good	Good
February	.....	....	....	12	....		.....	1		.....	.....	.....
March	.....	....	....	16	2		.....	1		.....	.....	.....
April	.....	....	....	5	2		.....	1		.....	.....	.....
May	.....	1	....	8	1		.....	2		.....	.....	.....
June	.....	....	....	16	1		.....	1		.....	.....	.....
July	.....	....	....	18	1		.....	2		.....	.....	.....
August	.....	2	....	26	2		.....	2		.....	.....	.....
September	.....	1	....	16	....		.....	2		.....	.....	.....
October	.....	1	....	8	....		.....	1		.....	.....	.....
November	.....	1	....	18	....		.....	2		.....	.....	.....
December	.....	1	....	10	....		.....	2		.....	.....	.....

Our sanitary conditions are not as good as they ought to be. The jail was built with view of waterworks and sewerage, which has not yet been adopted. We have steel cells seven feet square, with four to a cell. Our diet is corn bread, bacon, molasses, turnips, peas, &c. I only get 20 cents for dieting prisoners, and consequently cannot give much variety.

Yours truly,

R. F. McCaslan, Sheriff.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

KERSHAW.

Months.	Jail.										Court House.	
	General Sanitary Condition.	Number Persons Confined				Space Allotted Each (in Cubic Feet).	Number Giving Evidence of Successful Vaccination.	Number who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	Number of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
Jan.....	Much Imp'ov'd	3	....	11	....	613	3	5	Good & Ample	.....	Good	Ample
Feb.....	"	1	....	4	....	1797	.....	.....	"	.....	"	"
March....	"	3	....	8	1	749	2	4	"	.....	"	"
April.....	"	....	....	6	1	1284	1	5	"	.....	"	"
May.....	"	1	....	11	2	691	5	4	"	.....	"	"
June.....	"	2	....	5	....	1284	.....	2	"	1	"	"
July	"	2	....	5	....	1284	.....	3	"	.....	"	"
Aug	"	4	....	12	2	499	1	3	"	.....	"	"
Sept	"	....	2	8	3	691	4	4	"	2	"	"
Oct.....	"	....	....	9	1	898	1	3	"	1	"	"
Nov	"	5	....	18	6	309	1	1	"	1	"	"
Dec.....	.....	....	....	....	....	.....	.....	.....	.....	.....	.....	.....

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

LANCASTER.

Months.	Jail.										Court House.	
	General sanitary condition.	Number of persons confined.				Space allotted each. (in cubic feet.)	No. giving evidence of successful vaccination.	Number who can read and write.	Diet as regards wholesomeness and sufficiency.	Number of cases of sickness.	General sanitary condition.	Water closet recommendation, ample or deficient.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
January.....	Fair	2	....	8	....	10x10	.....	4	Good	.....	Good	Deficient
February	Fair	2	....	8	....	10x10	.....	5	Good	.....	Good	Deficient
March.....	Fair	3	....	7	....	10x10	.....	6	Good	.....	Good	Deficient
April.....	Fair	1	....	5	....	10x10	.....	3	Good	.....	Good	Deficient
May	Fair	1	....	9	2	10x10	.....	5	Good	.....	Good	Deficient
June.....	Fair	3	....	16	2	10x10	.....	10	Good	4	Good	Deficient
July	Fair	3	....	7	....	10x10	.....	.....	Good	.....	Good	Deficient
August.	Fair	1	....	9	....	10x10	.....	5	Good	.....	Good	Deficient
September.....	Fair	..	....	18	....	10x10	.....	8	Good	3	Good	Deficient
October.....	Fair	1	....	21	....	10x10	.....	10	.....	3	Good	Deficient
November.....	Fair	....	....	10	....	10x10	.....	4	Good	1	Good	Deficient
December.....	Fair	2	....	16	....	10x10	.....	9	Good	.....	Good	Deficient

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

LEXINGTON.

Months.	Jail.											Court House.	
	General Sanitary Condition.	Number of Persons Confined.				Space allotted each (in cubic feet.)	No. giving evidence of successful vaccination.	No. who can read and write.	Diet as regards wholesomeness and sufficiency.	Number of cases of sickness.	General sanitary condition.	Water closet recommendation, ample or deficient.
		Male, White.	Fem'le, White.	Male, Col.	Fem'le, Col.							
January	Good.	.....	.....	8	1	5x8	None.	Average about two a month.	Good.	.....	Good.	Sometimes ample, sometimes deficient; depends on water supply. Closets are good
February		1	.....	13	.....					1		
March		1	.....	6	.....					1		
April		1	1	4	.....					1		
May		2	.....	2	.....					1		
June		2	.....	9	2					1		
July		1	.....	6	.....					.....		
August		1	.....	8	.....					.....		
September		5	.....	10	.....					.....		
October		3	.....	1	.....					.....		
November		1	.....	6	.....					.....		
December		2	.....	3	.....					.....		

T. H. CAUGHMAN, S. L. C.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

LAURENS.

Months.	Jail.										Court House.	
	General Sanitary Condition.	Number of Persons Confined.				Space Allotted Each (in Cubic Feet.)	Number Giving Evidence of Successful Vaccination.	Number who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	Number of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
January..	Bad.	3	....	22	....	6 feet	16	9	Good.	None	Bad.	None.
February.	"	3	....	27	....	"	.....	10	"	2	"	"
March....	"	....	....	17	2	"	.....	10	"	2	"	"
April.....	"	5	...	23	2	"	2	15	"	3	"	"
May.....	"	1	....	19	2	"	2	12	"	2	"	"
June.....	"	2	1	24	2	"	.....	15	"	3	"	"
July.....	"	1	....	48	3	"	.....	.....	"	5	"	"
August....	"	....	....	15	1	"	.....	10	"	.....	"	"
September	"	....	....	22	1	"	.....	10	"	* 2	"	"
October...	"	3	....	30	3	"	.....	18	"	3	"	"
November	"	....	....	16	2	"	.....	9	"	2	"	"
December.	"	1	....	18	2	"	.....	9	"	3	"	"

*1 Death.

DEAR DOCTOR: Our jail here is in a deplorable condition. We need more room, besides we need waterworks, closets, lights and much more ventilation. Our jail is nearly 100 years old, and needs repairs. In fact it is a disgrace to our county. Help me.

Yours,

GEO. S. MCCRAVY, Sheriff.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

NEWBERRY.

Months.	Jail.										Court House.	
	General Sanitary Condition.	No. of Persons Confined.				Space Allotted Each (in Cubic Feet.)	No. Giving Evidence of Successful Vaccination.	No. who can Read and Write.	Diet as Regards Wholesomeness and Sufficiency.	No. of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation, Ample or Deficient.
		Male - White.	Female—White.	Male—Colored.	Female—Colored.							
January	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
February	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
March	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
April	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
May,	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
June	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
July	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
August	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
September	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
October	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
November	.....	....	....	....	....	....	.....	....	.....	.....	.....	.....
December	.....	....	....	10	....	....	.....	4	Bacon, Beef, Cabbage, Flour and Corn Bread, Peas, Molasses, &c.	.....	Bad. None.	Bad. None.

Sanitary Condition of Jails and Court Houses, by Months, for Each County.

PICKENS.

Months.	Jail.										Court House.	
	General Sanitary Condition.	Numbur of Persons Confined.				Space Allotted Each (in cubic feet).	Number Giving Evidence of Successful Vaccination.	Number who can Read and Write.	Diet as regards Wholesomeness and Sufficiency.	Number of Cases of Sickness.	General Sanitary Condition.	Water Closet Recommendation. Ample or Deficient.
		Male, White.	Female, White.	Male, Colored.	Female, Colored.							
January	.....	7	....	....	....	.....	None.	Can't Say.	O. K.	None at This Time.	.....	Water Works Deficient.
February	.....	4	....	....	....	.....					.....	
March	.....	12	....	....	....	.....					.....	
April	.....	10	....	....	....	.....					.....	
May	.....	7	....	....	....	.....					.....	
June	.....	11	....	....	....	.....					.....	
July	.....	18	....	....	....	.....					.....	
August	.....	10	....	....	....	.....					.....	
September	.....	10	....	....	....	.....					.....	
October	.....	22	....	....	....	.....					.....	
November	.....	8	....	....	....	.....					.....	
December	.....	4	....	....	....	.....					.....	

Annual Reports, 1897, Department of Health, of the City of Charleston, S. C.

REPORT OF HEALTH OFFICER FOR 1897.

City of Charleston, S. C.,
Department of Health, January 1, 1898.

To the Honorable the Mayor and Aldermen:

Gentlemen: I have the honor to submit my Annual Report covering the table of vital statistics and meteorological observations, with such proceedings of this department as have been undertaken for the benefit of this department, and the general benefit of the city for the year 1897:

The city of Charleston, although dangerously threatened with pestilence during the year 1897, has enjoyed a most remarkable degree of good health.

There has been no epidemic of any character whatever, severe or mild, and although it was feared at one time that there might be a serious outbreak of scarlet fever, the cases that have occurred have been generally very mild; there have been only 5 white and 1 colored deaths from scarlet fever during the entire year. There has not been a single death from diphtheria either white or black in 1897.

There have been the same number of deaths from typhoid fever among the whites as occurred in 1896, and 4 fewer deaths from typhoid fever among the colored race.

There were 447 deaths among the white race in 1897 and 521 deaths among the white race in 1896. There have occurred, therefore, 74 fewer deaths among the white race in 1897 than occurred in 1896.

There were 1,143 deaths in 1897 among the colored race and 1,348 deaths among the same race in 1896—consequently 205 fewer colored deaths in 1897 than in 1896. A total for the year 1897 of 279 deaths less than in 1896.

This is the lowest death record for very many years, with the exception of 1888, when there were 419 white deaths; it is the lowest in 10 years, and the lowest in the colored race in a very great number of years.

It is the lowest ratio of mortality that has occurred, white and black, in 29 years. In 1897 there were 26 deaths from consumption, while in 1896, 45. In 1897 there were 158 deaths from consumption among the colored, and in 1896, 243; 104 fewer consumptive deaths in 1897 than in 1896.

There were 42 fewer deaths from diarrhœal diseases in 1897 than in 1896.

In 1896 there were 20 deaths from measles; none in 1897.

In 1897 there were 15 deaths from whooping cough.

In 1896 there were 32 deaths from whooping cough.

The city is surely to be congratulated on the above record. The ratio per thousand among the whites is 15.52; the lowest in many years, and compares most favorably with the record of the cities of the world.

It might seem strange that the Health Officer of Charleston should claim great good health when there are wide publications indicating the opposite. This year affords a good opportunity for saying what is carefully suppressed in fixing the equation of good health. The ratio per 1,000 among the colored race for 1897 is 31.49.

This is the lowest ratio per thousand among the colored race in over 20 years, and it is double the ratio of the whites; and in a large number of cities we have been able to get the ratio of the colored as compared with the whites; it is double, and the whites is as above stated, 15.52. Now to add the two and take the ratio, white and black, runs up the white ratio 50 per cent. and lowers the colored comparatively; the ratio, white and black, for 1897 is 24.39.

We have claimed for Charleston a very good degree of health among the whites, and the same is shown by the ratio for 10 years, which is 18.32—20 being fairly good; when the health of the city is discussed, it is only fair and just that the separate ratio should be given.

In the decade from 1850 to 1860, the ratio, white and black, was about the same.

Since the fostering hand of the white man has been taken away the ratio has been doubled. In looking over the necessities for the health of Charleston, we find two great factors that have militated against the city. We have an inadequate supply of good water and we have no inspection of food.

These are extremely important matters, and should engage the earnest attention of the governing classes.

During the last 2 years 18 drinking fountains have been placed in the different wards of the city, furnishing an abundant supply of

artesian water in those localities, wholesome, pure water. We believe that these supplies of water have been of great benefit to the poorer population, and we would urge that these sources of supply be doubled. In reference to food, we have for many years recommended an inspection of food. There should be an inspector for the general food supply of the city.

We would earnestly bring to your consideration the very great necessity for an abattoir for the general slaughtering and care of all animals butchered for daily use. The advantage would soon repay for the outlay.

There should be placed in charge of this abattoir an educated veterinary surgeon who would be competent to at once differentiate healthy and unhealthy flesh. Attached to this abattoir there should be cold storage rooms for the preservation of all meats. To no class of our people would such a well conducted abattoir be of so much service as to our butchers. In Germany there are several hundred of such abattoirs—many in England, and in this country a few.

We would most earnestly beg your serious consideration as to this necessity.

It is certainly most gratifying to note the decrease in the deaths from consumption. It is surely a remarkable statement to make. In 1896, 288 deaths from consumption and in 1897, 184 deaths from consumption. We believe this to be greatly due to the widespread interest that is more and more being manifested in spreading broadcast information as to the way in which consumption spreads its deadly influences.

I have recommended in my address before the American Public Association that every sanitarium should "fight consumption." I believe that with persistent effort the governing classes of every community would become deeply interested, and give assistance in this direction. It is a preventable disease and should be prevented. Buffalo, New York, Chicago, the State of Michigan and other States and municipalities are taking rigorous measures to suppress the great plague.

It is my belief that if in every city of over 10,000 people, a hospital should be built and conducted especially for the care of consumptives —a place where they could be cared for and where they would be harmless—a boon and a blessing to the sick and the well, succoring the sick and saving the well.

With a disease now so well understood, and with constant effort to minimize it, it is not improbable that it will in the near future greatly diminish.

On September 14th last, official notice came to the health authorities that there was yellow fever prevalent in New Orleans, Mobile, and part of the Mississippi Gulf coast. On the same day quarantine was proclaimed against all territory infected with yellow fever, and for 71 days there was the utmost vigilance exercised, that neither man nor merchandise came from any place infected with yellow fever. The efforts made by the mayor of the city and by the health authorities of the city were warmly seconded by all classes; the press and the great transportation lines and all our citizens generally felt that the pestilence should be kept away. The police authorities of the city were utilized, and all the railroads, all the water and steamship companies were all regularly inspected, and all persons coming from infected territory were hindered from coming into the city. Yellow fever spread and appeared in 10 States and 42 places. As far as we are informed the quarantine was thoroughly carried out—not a person and not an article of freight coming into our city without especial permission given, after ascertaining that there was no danger —no danger whatever; there were no risks taken—no risks whatever, In the presence of such a peril to the welfare of 65,000 people, all personal consideration should be in abeyance, and the general good and the general safety of the people paramount.

With constant and untiring efforts and universal support success was assured, Charleston escaped yellow fever in 1897.

Quarantine.

There have been no cases of contagious or infectious disease arriving at the Quarantine Station during the year 1897.

The station has been kept up to the first class standard that has been maintained for so many years past.

The Maritime Sanitation Committee, under the able and zealous efforts of Mr. Hall T. McGee, have constantly labored to keep the station and plant in good order and ready for work.

During the year a new naptha launch has been purchased, longer and broader than the one in use for the past seven years.

It is a most commodious and useful adjunct to the equipment of the port.

Dr. Lebby, Quarantine Officer, with the employees of the station, have been always elert and efficient.

There have been 127 arrivals at the station during the year 1897.

Steamships	97
Barques	13
Brigs	2
Schooners	15
Total	127

These came from the following places:

Africa	4	Honduras	11
Belgium	1	Mexico	1
Bermuda	1	Nova Scotia	1
Cape de Verde	2	Portugal	10
Chili	1	Sicily	1
Coastwise	11	South America	5
Germany	25	Spain	15
Great Britain	21	Teneriffe	1
Guatemala	1	West Indies	14
Holland	1		

Total 1897	127
Total 1896	121

Sanitary Inspectors.

There are 4 health districts in the city, King street dividing north and south and Calhoun east and west.

To each district is assigned a Sanitary Inspector.

Health District No. 1, C. L. Trenholm.

Health District No. 2, A. W. Mitchell.

Health District No. 3, Mike Hogan.

Health District No. 4, D. Pinckney Johnstone.

These Inspectors visit 50 premises every day, and inspect the premises, vaults, drains, etc., and report the same day in writing at 12 o'clock, what nuisances they find to the Health Officer. Notices are served immediately, requiring the owners to abate the same. During the period that yellow fever prevailed in Alabama, Mississippi and Louisiana, there were 4 additional Inspectors put on duty; Messrs. Thomas, Garity, Bissell and Robinson.

The whole city was thoroughly inspected; a house to house visitation was had—the inspectors each day bringing the names of parties visited, 50 in number, signed every day with each report.

The sanitary inspectors have been faithful, constant and intelligent in their work.

Disinfection.

An immense supply of disinfectants have been distributed during the summer months, from May 1st to November 1, copperas in solution and lime.

During the months of September and October 4 carts were employed, and 5 or 6 hundred barrels of lime were distributed in various parts of the city, besides a great quantity of copperas water. Chloride of lime and carbolic acid were freely used in every locality where required.

The formaldehyde lamps have been in constant use in every case of contagious disease.

Whenever required, all articles of bedding, etc., were carried to the steam cylinder at the city hospital, and subjected to 230 degrees Fahr. steam heat.

There were 221 houses fumigated.

137,200 gallons of copperas solution distributed. 43,972 persons supplied with disinfectants.

442 persons supplied with carbolic acid.

Bedding and mattresses from 60 houses were subjected to steam disinfection.

No glandered horses were reported during the year.

Typhoid fever cases reported, white 48, colored 46.

Scarlet fever cases reported, white 83, colored 32.

Diphtheria cases reported, white 6, colored 6.

Mr. F. Nipson, who superintends the disinfection, has beeen constantly zealous and efficient.

Interments.

Interments were made within the city limits during the year 1897, at the following grounds:

Whites.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
St. Phillip's Church yard	1	1	1	1		1		1			2	1	9
St. Paul's			1										1
St. John's Lutheran											1		1
St. John's Chapel	3		4	1	2	2	1	2	1	1	1	2	20
St. Peter's									1				1
1st Baptist	2												2
1st Presbyterian		1		1	1				1	1			5
2nd Presbyterian	1	1				1			1		1		5
Bethel					1						1	2	4
Circular										2			2
Unitarian				1									1
K. K. B. E. Coming Street	1				1	2							4
Seaman's				1									1
St. Michael's						1					1		2
Huguenot								1					1
Cathedral lot										1			1
Totals	8	3	6	5	5	7	1	4	4	5	7	5	60
1 white at Bathsheba	1												1
1 white at Colored Brotherly						1							1
1 white at Colored Catholic									1				1
Totals	1					1			1				3
Total interments													60
Colored and Black.													
Field of Rest	4	2		2		1	2	3	1		1	2	18
Ephrat		1			1		2		2				6
Colored Lutheran	4	2		4	4	4	1	4	2	8	4	3	40
Colored Catholic	1						1			2		1	5
Bathsheba	5	3	6	5	8	8	7	6	11	4	9	11	83
Calvary Episcopal	1	1		1	1	1			3		2		10
Colored Scotch	1	3	3	2	1	1		1	3	2	2	2	21
McPhelia	1												1
Totals	17	12	9	14	15	15	13	14	22	16	18	19	184

Public.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
White	1			1			2	2	1	2	1	4	14
Colored and black	18	9	23	29	20	26	32	24	37	24	21	45	318
Totals	19	19	23	30	20	26	34	26	38	26	22	49	332

Scavengering.

There were 38,007 loads of garbage removed during 1897 from the streets.

The system practiced in Charleston is most excellent. The carts are owned by the city, and the drivers and the superintendent are employed by the city.

In this way complete control is exercised. The carts are out every day in the year except Sundays, and every day before 12 all the garbage is out of the city. Messrs. Jervey and McCarrel, in charge of the carts, have been zealous and efficient.

Loads hauled each month:

January	2,563	July	3,915
February	2,384	August	3,547
March	2,968	September	3,839
April	2,895	October	3,706
May	2,815	November	3,112
June	3,115	December	3,110

Total 1897	38,007
Total 1896	35,424

Night Soil.

There are about 12,000 privy vaults in Charleston, filled with nauseous malodorous polluting night soil, permeating the soil and fouling it.

In this age of sanitary progress, it should be the objective point of the health authorities to try and have a water conduit of the sewerage, a system that should carry away every 24 hours, all fœcal matter into the sea. A part of the city below Broad street has been sewered with the Shone pneumatic pressure system. As far as it has been tested, it has been most successful. The great pressing need of Charleston is a fuller water supply. We should have a daily supply of 8,000,000 or 10,000,000 gallons of water. With such an assured supply, the whole city could readily and rapidly be sewered. It will be an unmixed blessing when this is consummated, and doubtless a notable decline in the ratio of mortality will be noted.

We cannot too strongly urge upon the governing body, our city council, that they should make an earnest effort to obtain this water supply at an immediate date. Without this water supply the problem of the disposal of the sewerage cannot be solved.

There were 2,194 privy vaults cleaned out in 1897.
There were 1,966 privy vaults cleaned in 1896.

City Dispensary Service.

There were 31,240 patients treated during the year 1897 in the six dispensing districts—7,488 white, 23,752 colored.

In 1896 there were 28,644.

The city is divided into 6 dispensary districts; there is a physician elected by city council for each of these 6 districts. The charity is far-reaching and beneficent, as will be seen by looking at the table; many thousands of the poor white and black receive gratuitous medical service.

The physicians reside in the districts, have their offices in the districts, and are ready for calls night and day.

City Dispensary Druggists.

To each of the six dispensary districts there is assigned a dispensary druggist, who furnishes medicines and prescriptions as ordered by the six dispensary physicians. The service is most efficient, and is a blessing to the poor and necessitous.

The following number of prescriptions were furnished during the year 1897:

Health District No. 1....5,892	Health District No. 4....5,025
Health District No. 2....4,791	Health District No. 5....9,494
Health District No. 3....6,020	Health District No. 6....7,531

Total in the year 1897.....38,753
Total in the year 1896.....36,290

Bacteriology.

The city council, at the earnest request of the Board of Health, made an appropriation last June to establish a service of bacteriology, to be under the direction of the Board of Health. Through the kindness of the faculty of the Medical College of South Carolina, permission was granted to use their biological laboratory. Dr. Robert Wilson, Jr., was elected to fill the post. He has been most faithful and efficient.

The action of council has been more than justified, and it is the universal testimony of the medical fraternity of Charleston, as shown by a communication from them, that it was a need of urgent necessity.

I append the report of Dr. Wilson.

Financial.

Amount appropriated, including $3,000 free quarantine, bacteriologist and epidemic fund against yellow fever on the Gulf coast	$22,323 57
Amount expended	21,978 40
Balance unexpended	$345 17

Respectfully submitted.

H. B. HORLBECK, M. D.,
Health Officer.

REPORT OF BACTERIOLOGIST.

Charleston, S. C., January 1st, 1898.

Dr. H. B. Horlbeck, Health Officer.

Sir: I have the honor to herewith submit my report of the work accomplished by the bacteriological office since its institution in June, 1897, to January 1st, 1898.

Samples of water from ninety-six wells and cisterns have been examined. With three or four exceptions these samples were taken from premises where typhoid fever had occurred. The common colon bacillus was found to be present in seven cisterns and two wells. This organism is a normal inhabitant of the intestinal canal, and its presence in water may be taken as an indication of faecal pollution. In two cases in which the b. coli was found I was able to visit and personally investigate the premises from which the samples were taken. The result was a clear demonstration that in each instance the source of typhoid infection was the privy vault. These two privies alone were responsible for four cases of typhoid fever and three deaths.

The hydrant water of the city has been examined ten times, the samples being collected from the following locations: Coming street, opposite George, corner New and Tradd streets; Queen street, between Church and Philadelphia streets; corner Smith and Radcliffe streets; and the reservoir on George street. This water has been found to be a perfectly safe drinking water. This opinion finds significant confirmation in the fact that of the cases of typhoid fever referred to me during the past seven months not one occurred among those who use the hydrant supply. Nineteen samples of milk from various dealers have been examined. A number of these samples gave evidence of being watered. In one or two instances the watering amounted to as much as thirty per cent. It is hardly necessary to call attention to the great danger of in this manner

spreading water-borne diseases, such as typhoid fever. Nor should we overlook the fact that a large number of the intestinal diseases of infancy, which during the hot months carry off so many of the youngest members of our population, are directly traceable to contaminated milk. The milk of tuberculous cattle is another constant menace to the public health.

This matter merits the gravest thought; and I earnestly trust that the council will consider the practicability of adopting measures looking toward some regulation of the milk supply.

The medical profession of the city has shown its appreciation of the office by frequent calls for microscopic aid in diagnosis. Eighty-five cases of suspected typhoid fever were submitted for diagnosis. In some instances the examination of the blood had to be repeated several times, making a total of ninety-six examinations. A positive diagnosis was returned in forty-three cases. A number of the negative cases were by further examination proved to be malaria. It is worth while noting that in two instances a diagnosis of typhoid fever was made on the third and fifth days, respectively; and in two on the fourth day of the disease, while ordinarily without microscopic aid the diagnosis can hardly be made definitely within less than a week.

Forty-nine samples of blood from suspected malarial patients were received. In a few instances in which a negative opinion was returned, the application of the serum test demonstrated the presence of typhoid infection.

Fifty-two samples of sputum from suspected consumptive patients, and two from doubtful cases of pneumonia, were received and examined.

Tubes for the cultivation of the diphtheria bacillus from the exudate from suspicious throats have been left at the specified stations, where they may be obtained upon request. Only eight cases have been submitted for diagnosis, and in but three instances were the results confirmatory. In addition to these, six new growths or tumors have been examined and three miscellaneous bacteriological examinations have been made of urine, pus and "sterilized" water.

Respectfully,

ROBERT WILSON, JR., M. D., Bacteriologist.

MORTUARY STATISTICS.

Report of the Number of Deaths in the City of Charleston, S. C., in Each Month for the Year 1897.

WHITES.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abscess	....	....	....	....	....	....	1	....	....	....	....	....	1
Alcoholism	....	....	....	....	....	1	....	....	....	....	....	....	1
Anæmia	....	....	....	....	....	....	....	....	....	....	....	1	1
Aneurism	....	....	....	....	....	....	1	....	....	....	....	....	1
Angina pectoris	....	1	....	....	....	....	....	....	....	....	....	1	2
Apoplexy	3	3	1	4	1	3	1	....	2	2	2	2	24
Asthenia	1	....	....	....	....	....	....	....	....	....	....	....	1
Asthema	....	....	....	....	....	....	....	....	....	1	....	....	1
Atheroma	....	....	....	....	....	....	....	1	....	....	....	....	1
Bowels, inflammation of	....	....	....	....	....	....	....	....	1	....	....	....	1
Brain, congestion	....	....	....	1	....	1	....	1	....	....	....	....	3
Brain, effusion on	....	....	....	....	....	1	....	....	....	....	....	....	1
Brain, hæmorrhage	....	1	1	....	....	....	....	1	....	1	....	....	4
Brain, softening of	....	....	....	1	....	....	....	....	....	....	....	1	2
Brain, sclerosis of	1	....	....	....	....	....	....	....	....	....	....	....	1
Bronchitis	1	....	....	2	....	....	....	1	....	....	1	....	5
Bronchitis, capillary	1	1	1	....	....	....	....	....	....	....	....	....	3
Cancer	....	2	1	1	1	....	....	....	....	1	2	1	9
Cancer uteri	....	....	....	1	....	1	1	....	....	....	1	....	4
Cholera infantum	....	....	....	....	3	4	2	1	....	....	....	1	11
Chill, congestive	1	....	....	....	....	....	....	....	....	....	....	....	1
Consumption	4	3	6	....	1	1	2	3	2	....	2	2	26
Convulsions	1	1	....	....	....	1	....	....	....	....	....	....	3
Croup, membranous	....	....	....	....	1	....	....	....	....	....	....	1	2
Cystitis	....	....	....	....	....	....	....	....	....	....	....	1	1
Dentition	....	....	2	2	....	3	1	....	....	1	....	....	9
Diarrhœa	....	1	....	....	....	1	1	....	....	....	2	....	5
Dropsy	....	....	2	....	....	....	....	....	....	....	....	....	2
Dysentery	1	....	1	....	1	3	....	1	....	....	....	....	7
Enteritis	1	1	....	....	1	....	1	....	1	1	....	....	6
Entero colitis	....	....	....	1	4	4	3	3	1	....	1	....	17
Epithelioma	....	....	....	....	1	....	....	....	....	....	....	....	1
Fever	....	....	....	....	....	....	....	1	....	....	....	....	1
Fever, bilious	....	....	....	....	....	....	....	....	1	....	....	....	1
Fever, continued	....	....	....	....	....	1	....	....	....	....	....	....	1
Fever, malarial	....	....	....	....	....	2	2	2	3	1	2	1	13
Fever, puerperal	....	....	....	....	1	....	....	....	....	....	....	....	1
Fever, remittent	....	....	....	....	....	1	....	....	....	....	....	....	1
Fever, scarlet	....	....	....	....	....	....	2	....	1	1	1	....	5
Fever, typhoid	1	1	1	....	....	1	....	2	5	....	....	3	14
Gangrene	....	....	....	....	....	....	....	....	....	....	1	....	1
Gangrene, senile	....	....	1	....	....	....	....	....	....	....	....	....	1

Deaths in the City of Charleston—Continued.

WHITES.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Castritis	....	....	1	....	....	1	....	....	1	2	1	2	8
Gostro enteritis	....	....	....	....	....	1	....	1	....	1	....	1	4
Hæmorrhage	....	1	....	....	....	....	....	....	....	....	....	....	1
Heart, disease of	1	2	5	3	2	4	....	2	4	2	4	4	33
Hemipelegia	....	....	....	....	....	....	....	....	....	....	....	1	1
Hernia, strangulated	....	....	....	1	....	....	....	....	....	....	....	....	1
Hypertrophy, prostate	....	....	....	....	....	....	....	....	....	1	....	....	1
Hysterectomy	....	....	....	....	....	....	1	....	....	....	....	....	1
Inanition	....	....	....	....	....	1	1	....	....	....	....	....	2
Intestinal obstruction	....	....	....	....	....	1	....	....	....	....	....	1	2
Jaundice	1	....	....	....	....	....	....	....	....	....	1	....	2
Kidney, Bright's disease of	4	....	....	1	1	3	....	3	1	1	3	2	19
Kidney, cirrhosis of	1	....	....	....	....	....	....	....	....	....	....	....	1
Kidneys, inflammation of	2	1	3	....	1	2	....	1	....	1	....	6	17
La grippe	16	8	2	....	....	....	....	....	....	....	....	....	26
Laryngitis	....	....	1	....	....	....	....	....	....	....	....	....	1
Liver, cirrhosis of	....	....	....	....	....	....	....	2	....	....	....	....	2
Liver, inflammation of	....	....	....	....	....	....	....	....	....	....	....	1	1
Locho metritis	....	....	....	....	1	....	....	....	....	....	....	....	1
Locomotor ataxia	2	....	1	....	....	1	....	....	....	....	....	....	4
Lungs, congestion of	....	1	....	....	....	....	....	....	....	....	....	....	1
Marasmus	....	....	....	1	2	2	....	1	....	1	....	3	10
Meningitis	....	1	....	....	....	1	....	....	....	2	....	1	5
Neurasthenia	....	....	....	....	....	....	....	....	....	....	....	1	1
Old age	....	1	....	4	....	4	1	1	1	3	....	2	18
Paralysis	....	....	1	2	....	1	....	....	1	4	....	....	9
Parturition	....	1	....	....	....	....	....	....	....	2	1	....	4
Peritonitis	....	1	1	....	....	....	....	....	....	2	1	6	11
Pneumonia	3	2	3	3	6	2	....	....	....	....	....	....	19
Pnemonia, broncho	....	....	....	....	....	....	....	....	....	....	1	....	1
Puerperal metritis	....	....	....	1	....	....	....	....	....	....	....	....	1
Pyosalpingitis	....	....	....	....	....	1	....	....	....	....	....	....	1
Sarcoma	....	....	....	....	....	....	1	....	....	....	....	....	1
Sclerosis spinal cord	....	....	....	....	1	....	....	....	....	....	....	....	1
Septicæmia	1	1	1	....	....	....	....	....	1	....	....	1	5
Stricture urethra	....	....	....	....	....	2	....	....	....	....	1	....	2
Sunstruck	....	....	....	....	....	....	1	....	....	....	....	....	1
Syphilis	....	....	....	....	....	....	....	....	1	....	....	....	1
Tetanus	....	....	....	....	....	....	....	....	....	....	....	2	2
Tuberculosis	3	....	1	....	2	1	....	....	2	2	2	1	14
Tumor	....	....	1	....	....	....	....	....	....	....	1	....	2
Trismus nascentium	1	1	....	2	1	....	2	2	1	....	....	....	10
Ulcer	....	....	....	....	....	....	....	....	....	....	....	1	1
Whooping cough	....	....	....	....	1	....	....	....	....	....	1	....	2
Totals	51	37	38	31	33	56	25	30	30	33	33	50	447

Deaths in the City of Charleston.—Continued.

BLACK AND COLORED.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abscess	....	1	....	....	....	1	....	5	2	....	....	....	9
Albuminuria	....	1	....	....	....	....	....	....	....	....	1	1	3
Alcoholism	....	....	....	1	....	....	....	....	....	....	....	....	1
Anæmia	....	....	....	....	....	1	1	....	....	....	....	....	2
Aneurism	....	....	....	....	....	....	....	....	....	....	....	1	1
Apoplexy	4	2	1	2	6	3	....	....	5	....	3	4	30
Appendicitis	....	....	....	....	....	....	....	....	....	....	....	1	1
Asphyxia	....	....	....	....	....	....	....	....	....	....	....	1	1
Asthma	....	....	....	....	....	....	....	....	2	1	....	1	4
Bowels, inflammation of	....	1	....	....	2	3	1	1	....	1	....	....	9
Brain, congestion of	....	1	....	1	1	....	....	....	....	1	....	....	4
Brain, hæmmorrhage	....	....	....	1	....	....	....	....	....	....	1	....	2
Brain, inflammation of	....	....	....	1	....	....	....	....	....	....	....	....	1
Brain, softening	....	....	....	....	....	....	....	....	....	....	....	1	1
Bronchitis	2	2	....	2	2	1	....	....	....	1	....	....	10
Bronchitis, capillary	2	1	....	1	2	....	....	....	3	....	1	....	10
Cancer	1	1	....	....	....	1	1	....	1	....	....	1	6
Cancer, uteri	1	....	....	....	....	1	....	....	....	....	1	....	3
Chill, congestive	....	....	....	....	....	1	1	....	....	....	....	....	2
Cholera infantum	....	2	....	1	6	5	....	3	....	2	....	1	20
Cholera morbus	....	....	....	....	....	1	1	1	1	....	....	1	5
Cholæmia	....	....	....	....	....	....	....	....	1	....	....	....	1
Consumption	12	9	11	19	14	11	18	11	12	11	11	19	158
Convulsions	6	2	3	2	....	5	3	2	2	2	4	3	34
Convulsions, puerperal	1	1	1	....	....	....	1	1	....	....	....	....	5
Cystitis	....	....	....	....	....	....	....	....	....	1	....	....	1
Debility	1	....	....	....	....	....	....	....	....	....	1	....	2
Dentition	1	....	1	....	3	2	3	3	3	....	1	4	21
Diabetes	....	....	....	....	....	....	....	....	....	1	....	....	1
Diarrhœa	....	....	....	1	....	2	5	4	....	1	....	....	13
Dropsy	....	....	1	....	....	1	....	....	1	....	1	1	5
Dysentery	1	....	....	....	....	3	6	6	1	1	....	3	21
Embolism	....	....	....	....	....	....	....	....	....	....	....	1	1
Endocarditis	1	1	3	1	1	1	2	....	1	....	1	1	13
Enteritis	1	1	1	1	3	6	4	4	3	4	4	1	33
Entero colitis	....	....	....	....	5	2	5	2	4	2	....	....	20
Epilepsy	....	....	....	....	....	1	1	2	....	....	....	....	4
Erysipelas	....	....	....	....	....	....	....	....	....	....	....	1	1
Fever, bilious	....	....	....	....	....	....	....	1	....	....	....	....	1
Fever, catarrhal	....	....	....	....	....	....	....	....	....	....	1	....	1
Fever, intermittent	....	....	....	....	....	....	....	....	....	....	1	....	1
Fever, malarial	....	....	1	1	1	1	2	4	5	8	2	2	27
Fever, puerperal	....	....	....	....	....	....	....	2	....	1	1	....	4
Fever, typhoid	....	1	1	4	....	2	5	3	2	1	3	4	26
Fever, scarlet	....	....	....	....	....	....	....	1	....	....	....	....	1
Gangrene	1	2	....	....	....	....	....	1	....	....	....	....	4
Gastritis	....	1	....	1	2	1	3	....	1	1	1	....	11
Gastro enteritis	1	....	....	....	5	3	3	3	2	1	1	....	18
Hæmorrhage	1	....	....	....	....	....	....	....	....	....	....	....	1
Hæmorrhage, umbilical	....	....	....	....	....	1	....	1	1	....	....	....	3
Heart, disease of	6	4	6	5	5	3	7	7	5	6	7	4	65
Helminthiasis	....	....	1	....	....	....	....	....	....	....	....	....	1
Hemiplegia	....	....	....	....	....	....	1	1	1	1	....	....	4
Hernia	....	1	....	....	....	....	....	....	....	1	....	....	2
Hydrocephalus	....	....	....	....	....	....	....	....	....	....	1	....	1
Inanition	1	....	....	....	1	....	....	2	2	....	....	....	6
Insanity	2	....	....	....	....	....	1	1	1	....	....	....	5
Intussusception	....	....	....	....	....	....	1	....	....	....	....	....	1
Jaundice	....	....	....	....	....	....	....	....	1	....	....	....	1
Kidney, Bright's disease	....	4	4	2	3	7	1	4	4	3	2	4	39
Kidney, congestion of	....	....	....	....	....	....	....	....	....	1	....	....	1
Kidney, inflammation	6	2	1	6	2	1	10	4	7	4	6	15	64
La grippe	18	15	1	1	1	....	....	1	....	....	....	....	37
Laryngitis	....	....	....	....	....	....	....	....	....	....	....	1	1
Liver, atrophy of	....	....	....	....	....	....	....	....	....	....	....	1	1

Deaths in the City of Charleston.—Continued.

BLACK AND COLORED.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Liver, cirrhosis of	....	1	1	1	1	2	....	....	....	1	....	1	8
Liver, congestion of	....	....	....	....	....	....	....	....	1	1	....	....	2
Lungs, congestion of	3	1	1	2	3	1	....	1	....	1	2	4	19
Marasmus	....	4	....	3	3	3	6	....	5	4	4	2	34
Meningitis	....	4	2	2	1	1	....	1	3	....	1	2	17
Myelitis	....	....	1	....	....	....	....	....	....	....	....	....	1
Old age	3	3	1	1	4	1	2	1	1	1	2	4	24
Paralysis	1	....	1	2	....	1	1	3	....	3	....	1	13
Parturition	....	....	....	....	2	....	....	....	1	....	1	....	4
Pericarditis	....	....	....	....	....	1	....	....	....	....	....	....	1
Peritonitis	....	1	1	2	....	....	....	1	1	1	1	....	8
Pleurisy	....	....	....	....	....	....	....	....	....	1	....	....	1
Pneumonia	13	10	3	2	5	3	3	2	9	2	3	8	63
Pott's disease	....	....	....	....	....	....	....	....	1	....	....	....	1
Prostatitis	....	1	....	....	....	....	....	....	....	....	....	....	1
Rheumatism	....	....	1	....	....	....	....	....	....	....	....	....	1
Sarcoma	....	....	1	....	1	....	....	....	....	....	....	....	2
Scrofula	....	....	....	....	....	....	....	2	....	1	1	....	4
Septicæmia	....	2	....	....	....	1	....	....	1	....	....	....	4
Stricture urethra	....	....	....	....	....	....	....	....	1	....	....	....	1
Syphilis	....	....	....	2	1	1	....	1	2	2	....	3	12
Tetanus	1	....	....	1	1	....	2	....	1	....	2	....	8
Thrush	....	....	....	....	....	....	....	....	....	....	1	....	1
Trismus nascentium	3	1	8	6	9	8	9	2	5	4	5	8	68
Tuberculosis	3	1	2	5	2	3	2	5	3	5	7	1	39
Tumor	....	....	....	....	....	....	1	....	....	....	....	....	1
Tumor, ovarian	....	....	....	1	....	....	....	....	....	....	....	....	1
Ulcer	....	....	....	....	....	....	....	....	....	1	....	1	2
Uræmia	....	....	....	....	1	....	....	....	....	....	....	....	1
Vermes	....	1	....	....	....	....	1	....	....	....	....	....	2
Whooping cough	1	....	....	....	1	3	3	2	2	1	....	....	13
Wound	....	1	....	....	....	....	....	....	....	....	....	....	1
Totals	99	87	60	84	100	99	116	103	111	85	86	113	1143

Accidents.

Whites.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Accident	1	3	....	....	1	....	1	....	2	....	....	2	10
Burn	1	1	1	....	....	....	....	....	....	....	....	1	4
Cyanosis	....	....	....	....	....	....	....	....	....	1	....	....	1
Homicide	....	....	....	....	....	....	....	1	....	....	....	....	1
Suicide	....	....	....	....	....	....	1	....	....	....	1	....	2
Undeveloped	1	....	1	....	1	1	....	2	1	....	....	2	9
Totals	3	4	2	....	2	1	2	3	3	1	1	5	27
Black and Colored.													
Accident	4	....	2	4	2	5	1	....	4	1	1	4	28
Burn	1	....	....	....	1	....	....	1	1	....	....	1	5
Homicide	....	1	....	2	....	....	....	....	1	....	....	....	4
Shock	....	....	....	....	....	....	....	....	....	....	1	....	1
Undeveloped	6	1	3	2	3	3	2	1	2	3	4	5	35
Totals	11	2	5	8	6	8	3	2	8	4	6	10	73
Still Born.													
Whites	....	1	2	3	6	....	4	3	2	4	3	6	34
Black and colored	18	7	11	11	10	14	11	17	18	13	15	16	161
Totals	18	8	13	14	16	14	15	20	20	17	18	22	195
Premature Births.													
Whites	....	....	....	2	....	....	1	1	....	1	....	1	6
Black and colored	2	2	....	2	1	1	1	....	2	3	2	5	21
Totals	2	2	....	4	1	1	2	1	2	4	2	6	27

Marriages.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Whites	7	9	7	9	7	14	5	4	9	6	11	15	103
Blacks and colored	13	14	18	32	19	19	12	18	20	26	23	31	245
Totals	20	23	25	41	26	33	17	22	29	32	34	46	348
And 1 Chinaman married a colored woman													1

Births.

*Whites	30	25	21	17	13	21	24	18	33	24	19	21	266
*Black and colored	58	49	38	57	43	65	62	62	64	63	67	73	701
Totals	88	74	59	74	56	86	86	80	97	87	86	94	967
Twins.													
Whites							1						1
Blacks and colored				1		2	1	2					6
Totals				1		2	2	2					7

* Return of births incomplete.

Number of Deaths with Ages in Each Month for the Year 1897.

WHITES.

Ages.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Under one year	4	6	4	3	7	12	7	6	1	3	3	8	64
1 to 5 years	3	2	2	4	5	10	3	4	3	3	1	2	42
5 to 10 years	....	....	....	....	1	....	1	....	1	...	1	....	4
10 to 20 years	3	1	3	....	1	1	....	....	3	1	1	3	16
20 to 30 years	3	2	6	1	2	4	1	3	3	2	4	3	34
30 to 40 years	4	4	4	2	6	2	3	3	6	3	3	7	47
40 to 50 years	7	6	3	3	6	3	3	7	3	3	3	6	53
50 to 60 years	6	7	6	5	3	5	4	3	2	6	8	7	62
60 to 70 years	12	5	7	4	1	10	1	1	1	5	6	7	60
70 to 80 years	7	4	3	5	1	5	2	3	2	6	2	5	45
80 to 90 years	1	....	1	3	....	4	....	....	5	1	1	2	18
90 to 100 years	1	....	....	....	....	....	....	....	....	....	....	....	1
Over 100 years	....	....	....	1	....	....	....	....	....	....	....	....	1
Totals	51	37	38	31	33	56	25	30	30	33	33	50	447

BLACKS AND COLORED.

Under one year	17	16	16	16	36	27	23	14	20	22	19	24	250
1 to 5 years	13	14	3	9	20	17	24	21	19	11	10	10	171
5 to 10 years	2	3	1	4	....	3	3	3	10	4	3	1	37
10 to 20 years	6	8	4	7	4	4	10	12	11	8	8	12	94
20 to 30 years	18	9	7	17	10	11	13	17	13	12	11	11	149
30 to 40 years	6	11	10	4	5	13	10	7	11	10	14	13	114
40 to 50 years	7	9	8	6	7	6	16	11	8	5	6	13	102
50 to 60 years	12	8	4	12	10	5	13	6	11	8	7	13	109
60 to 70 years	8	2	5	6	1	9	2	8	4	1	5	6	57
70 to 80 years	7	5	1	3	4	3	..	2	2	3	1	4	35
80 to 90 years	3	1	1	....	3	1	1	2	2	1	1	3	19
90 to 100 years	....	1	....	....	....	....	....	....	....	....	....	3	4
Over 100 years	....	....	....	....	....	....	1	....	....	....	1	....	2
Totals	99	87	60	84	100	99	116	103	111	85	86	113	1,143
	150	124	98	115	133	155	141	133	141	118	119	163	1,590

Number of Deaths in Each Ward in Each Month.

WHITES.

Wards.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
No. 1	1	5	1	2	....	5	1	....	3	1	2	3	24
No. 2	1	3	....	1	4	1	2	....	1	2	3	1	19
No. 3	5	6	3	6	1	9	2	....	2	2	1	8	45
No. 4	5	2	2	....	1	5	3	5	1	1	2	2	29
No. 5	2	....	5	5	2	6	1	2	2	3	2	4	34
No. 6	6	3	1	2	4	3	....	1	....	1	3	7	31
No. 7	4	1	4	3	4	1	1	....	1	2	5	3	29
No. 8	10	5	10	2	5	8	8	5	6	9	8	11	87
No. 9	8	2	4	3	2	5	3	5	8	5	1	4	50
No. 10	3	4	2	1	4	8	1	4	4	1	2	2	36
No. 11	2	2	3	2	2	2	1	5	2	4	3	2	30
No. 12	4	4	3	4	4	3	2	3	....	2	1	3	33
Totals	51	37	38	31	33	56	25	30	30	33	33	50	447

BLACKS AND COLORED.

No. 1	10	7	3	4	6	2	8	6	6	4	7	6	69
No. 2	1	4	1	2	5	2	7	2	5	4	5	3	41
No. 3	4	2	1	7	3	3	2	4	4	4	5	8	47
No. 4	8	6	8	6	6	9	10	9	10	12	8	8	100
No. 5	7	9	3	10	6	5	6	9	5	5	3	4	72
No. 6	5	3	2	2	6	4	7	4	4	2	4	9	52
No. 7	8	5	3	7	9	7	8	5	8	7	5	8	80
No. 8	19	19	15	21	8	24	22	18	23	15	16	20	220
No. 9	9	7	4	4	1	8	9	11	12	6	4	8	83
No. 10	4	7	3	4	12	6	3	3	10	6	8	12	78
No. 11	6	10	6	6	22	15	18	17	13	8	9	16	146
No. 12	18	8	11	11	16	14	16	15	11	12	12	11	155
Totals	99	87	60	84	100	99	116	103	111	85	86	113	1143
	150	124	98	115	133	155	141	133	141	118	119	163	1590

Table Showing the Total Number of Cases Treated and of Deaths in the City Hospital and Health Districts During Each Quarter, 1897.

Cases Treated.	Whites. Quarter Ending					Black and Colored. Quarter Ending					Grand Totals in all Cases.
	March 31.	June 30.	September 30.	December 31.	Totals in the Year.	March 31.	June 30.	September 30.	December 31.	Totals in the Year.	
City Hospital	130	78	92	114	414	247	209	223	209	888	1302
Health District No. 1	573	499	500	560	2132	913	792	880	999	3584	5716
Health District No. 2	37	5	16	34	92	846	927	890	858	3521	3613
Health District No. 3	93	89	85	85	352	939	999	905	889	3732	4084
Health District No. 4	17	....	....	....	17	557	559	825	790	2731	2748
Health District No. 5	537	850	696	1006	3089	859	1414	2074	1391	5738	8827
Health District No. 6	358	442	494	512	1806	705	999	1167	1575	4446	6252
Totals	1745	1963	1883	2311	7902	5066	5899	6964	6711	24,640	32,542
Deaths.											
City Hospital	8	7	7	12	34	34	34	42	31	141	175
Health District No. 1	6	4	2	4	16	15	17	23	20	75	91
Health District No. 2	....	....	....	....	.....	24	15	19	21	79	79
Health District No. 3	1	....	....	3	4	17	21	23	17	78	82
Health District No. 4	....	....	....	....	.....	11	15	18	11	55	55
Health District No. 5	6	5	1	7	19	13	17	27	22	79	98
Health District No. 6	2	2	1	1	6	29	18	33	23	106	112
Totals	23	18	11	27	79	140	137	185	145	613	692

Number of Deaths in Each Month, with Place of Nativity, for the Year 1897.

WHITES.

Natives of	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
City of Charleston	24	18	17	13	20	28	18	17	15	16	17	28	231
South Carolina	7	9	11	2	5	6	4	6	5	1	5	3	64
Alabama	....	....	....	1	....	....	....	....	....	....	....	....	1
Connecticut	....	1	....	....	....	....	....	....	....	....	....	1	2
Georgia	1	....	1	....	1	2	1	....	....	....	....	1	7
Massachusetts	1	....	....	....	....	1	....	....	....	1	....	....	3
Maine	....	....	1	....	....	....	....	....	....	....	....	2	3
New Jersey	....	....	....	....	....	....	....	1	....	....	....	....	1
New York	....	....	1	....	1	....	....	1	....	....	1	1	5
North Carolina	....	2	....	....	....	1	....	....	....	....	....	....	3
Ohio	....	....	....	....	....	....	....	....	....	2	....	....	2
Pennsylvania	....	1	....	2	1	....	....	....	....	1	1	....	6
Tennessee	....	....	....	....	....	1	....	....	....	....	....	....	1
Vermont	....	....	....	....	....	....	....	....	1	....	....	....	1
Virginia	2	....	....	....	....	....	....	....	....	....	....	....	2
Austria	....	....	1	....	....	....	....	....	....	....	....	....	1
Denmark	....	....	....	....	....	1	....	....	....	....	....	....	1
England	2	....	1	....	1	....	....	....	....	....	....	2	6
France	....	....	....	....	....	....	....	....	1	1	....	....	2
Germany	5	2	1	4	4	6	1	4	2	3	3	4	39
Greece	....	....	....	....	....	....	....	....	....	....	1	....	1
Ireland	9	4	1	8	....	7	....	1	3	5	4	4	46
Italy	....	....	1	....	....	....	....	....	1	1	1	2	6
Poland	....	....	1	....	....	....	....	....	....	....	....	....	1
Portugal	....	....	....	....	....	....	1	....	....	....	....	....	1
Scotland	....	....	....	1	....	....	....	....	1	....	....	....	2
Spain	....	....	....	....	....	1	....	....	....	....	....	....	1
Unknown	....	....	1	....	....	2	....	....	1	2	....	2	8
Totals	51	37	38	31	33	56	25	30	30	33	33	50	447

Number of Deaths in Each Month, with Place of Nativity, for the Year 1897.

BLACK AND COLORED.

Natives of	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
City of Charleston	60	54	40	49	22	67	78	62	76	64	55	65	692
South Carolina	35	28	17	29	72	24	31	38	27	18	27	34	380
Alabama	....	1	....	....	1	....	....	....	....	....	....	....	2
Florida	....	....	....	1	....	1	....	....	....	1	1	....	4
Georgia	1	....	....	3	2	1	1	....	5	1	1	....	15
New York	....	....	....	....	....	1	....	....	....	....	....	....	1
North Carolina	1	1	1	1	1	2	....	....	1	....	1	2	11
Ohio	....	....	....	....	....	....	....	....	....	1	....	....	1
Virginia	2	....	1	....	1	1	1	1	1	....	....	2	10
South America	....	....	1	....	....	....	....	....	....	....	....	....	1
Unknown	....	3	....	1	1	2	5	2	1	....	1	10	26
Totals	99	87	60	84	100	99	116	103	111	85	86	113	1143

Total Mortality, 1897.

WHITE, BLACK AND COLORED.

Sex in Each Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
White, male	26	22	25	10	16	26	17	14	16	11	19	28	230
White, female	25	15	13	21	17	30	8	16	14	22	14	22	217
Totals	51	37	38	31	33	56	25	30	30	33	33	50	447
Colored, male	46	44	28	46	49	42	45	57	60	46	35	56	554
Colored, female	53	43	32	38	51	57	71	46	51	39	51	57	589
Totals, black and colored	99	87	60	84	100	99	116	103	111	85	86	113	1,143
Grand totals	150	124	98	115	133	155	141	133	141	118	119	163	1,590

Fstimated population:		Proportion of deaths:	
White	28,870	White	1 in 64
Blacks and colored	36,295	Blacks and colored	1 in 31
Total	63,165	Total white and colored	1 in 40

Ratio per 1,000 in the year—Whites 15.52
Black and colored 31.49
Total 24.39

Number of deaths among—White race 447
Black and colored race 1,143
Total 1,590

Comparative Mortality.

Years.	Whites.			Black and Colored.		
	Population.	Number of Deaths.	Proportion of Deaths.	Population.	Number of Deaths.	Proportion of Deaths.
1897	28,870	447	1 in 64	36,295	1,143	1 in 31
1896	28,870	521	1 in 55	36,295	1,348	1 in 26
1895	28,870	540	1 in 53	36,295	1,297	1 in 28
1894	28,870	479	1 in 60	36,295	1,300	1 in 27
1893	28,870	535	1 in 52	36,295	1,284	1 in 28
1892	28,870	586	1 in 49	36,295	1,317	1 in 27
1891	28,870	553	1 in 52	36,295	1,371	1 in 26
1890	28,870	511	1 in 56	36,295	1,310	1 in 28
1889	27,605	516	1 in 52	32,540	1,431	1 in 23
1888	27,605	419	1 in 56	32,540	1,375	1 in 23
1887	27,605	549	1 in 50	32,540	1,316	1 in 24
1886	27,605	571	1 in 48	32,540	1,596	1 in 20
1885	27,605	487	1 in 56	32,540	1,250	1 in 26
1884	27,605	592	1 in 42	32,540	1,215	1 in 22
1883	27,605	540	1 in 46	32,540	1,286	1 in 28
1882	25,000	584	1 in 45	27,286	1,172	1 in 23
1881	22,713	651	1 in 34	27,286	1,292	1 in 21
1880	22,713	500	1 in 45	27,286	1,121	1 in 24
1879	22,713	517	1 in 43	27,286	1,075	1 in 25
1878	22,713	514	1 in 43	27,286	1,125	1 in 24
1877	24,528	555	1 in 44	32,012	1,258	1 in 25
1876	24,528	668	1 in 36	32,012	1,343	1 in 23
1875	24,528	624	1 in 39	32,012	1,240	1 in 25
1874	24,000	718	1 in 33	26,000	1,230	1 in 21
1873	22,145	507	1 in 43	26,811	1,009	1 in 26
1872	22,145	521	1 in 40	26,811	1,036	1 in 25
1871	22,145	714	1 in 31	26,811	956	1 in 28
1870	22,145	539	1 in 41	26,811	1,075	1 in 24
1869	20,353	453	1 in 41	24,570	918	1 in 26

Ratio per 1,000 in the year.

Comparative Mortality.—Concluded.

Years.	White.	Black and Colored.	Total.
1897	15.52	31.49	24.39
1896	18.04	37.14	28.68
1895	18.70	35.45	28.18
1894	16.68	35.81	27.29
1893	18.58	35.37	27.91
1892	20.29	36.28	29.20
1891	19.15	37.77	29.06
1890	17.70	36.98	27.94
1889	19.05	43.66	30.79
1888	18.78	42.25	30.87
1887	19.52	40.40	31.00
1886	20.65	49.01	36.02
1885	17.64	38.49	28.88
1884	23.68	44.63	34.55
1883	21.60	47.13	34.92
1882	22 32	42.91	33.11
1881	28.66	47.13	38.08
1880	22.01	40.43	32.44
1879	20.68	43.59	27.92
1878	20.95	35.14	28.95
1877	22.66	39.29	32.06

Longevity, 1897.

Whites.—Date of Death.	Age.
Henrietta Hart, January 8	93
Caroline M. Tyler, January 21	80
Jane Wallace, March 23	89
Benj. McInnis, April 11	85
Mrs. Elizabeth S. Phillips, April 19	100
Mary Burk, April 21	85
Mrs. Martha C. Caldwell, April 27	83
Mrs. Mary G. Jaques, June 3	84
J. F. Bremer, June 24	85
Mary A. Levy, June 13	90
Mrs. Jane Andrews, June 25	85
Henry Magraff, July 19	80
John A. Burger, September 22	83
Annie Albrocht, September 20	84
Mrs. Annie E. Toomer, September 19	81
Mrs. Margaret Kilray, September 6	84
Rev. W. O. Prentiss, September 19	83
Mary Fanning, October 23	83
Mrs. E. W. Veal, November 14	82
B. S. D. Muckenfuss, December 19	87
James Gilliland, December 14	80

Colored.—Date of Death.	Age.
Nancy E. Brown, January 19	80
Rachel Brown, January 1	84
Rebecca Robinson, January 13	83
Siby Wilson, January 26	80
Benj. Fraser, January 2	84
Paddy Jones, January 29	80
Elizabeth Deye, January 14	80
Sarah Pinckney, February 11	84
Prince Simons, February 16	80
Cherry Mitchell, February 5	137
Martha Mathews, March 19	83
September Bennett, May 12	82
Rhina Monafaull, May 6	85
Baby Heyward, May 10	85
Ellen Vanderhorst, May 8	80
March Washington, June 29	85

John T. Hopkin, July 2 85
Jack Smalls, July 2..... 106
Annie Butler, August 27..... 85
M. Jos. B. Hasell, August 1..... 85
Silvia Polk, September 30 80
Eliza Mathews, September 10..... 88
Camilla Green, October 29..... 85
Rose Jackson, November 1..... 101
Eva Roberson, November 10 88
Nancy Walden, December 11..... 94
Samuel Brooks, December 25..... 82
Jacob Floyd, December 9..... 80
Allen Edwards, December 12..... 85
Mary R. Finley, December 2..... 95
Abbey Edwards, December 9..... 90

Annual Summary of Meteorological Observations Made by the U S. Department of Agriculture, Weather Bureau, at Charleston, S. C., 1897

AIR PRESSURE.

Mean, reduced to 32 degrees Fahrenheit, 8 a. m., 30.09 inches.

Mean, reduced to 32 degrees Fahrenheit, 8 p. m., 30.06 inches.

Mean annual, reduced to 32 degrees Fahrenheit, 30.08 inches.

Mean, reduced to 32 degrees Fahrenheit and sea-level, 8 a. m., 30.14 inches.

Mean, reduced to 32 degrees Fahrenheit and sea-level, 8 p. m., 30.11 inches.

Mean annual, reduced to 32 degrees Fahrenheit and sea-level, 30.13 inches.

Highest, reduced to 32 degrees Fahrenheit and sea-level, 30.61 inches, February 28.

Lowest, reduced to 32 degrees Fahrenheit and sea-level, 29.57 inches, September 22.

Annual range in pressure, 1.04 inches.

The average annual pressure, reduced to 32 degrees Fahrenheit and sea-level, of Charleston, S C., for 20 years, is 30.08 inches. For the months: January, 30.18; February, 30.13; March, 30.06; April, 30.04; May, 30.02; June, 30.03; July, 30.03; August, 30.03; September, 30.05; October, 30.03; November, 30.12; December, 30.16.

AIR TEMPERATURE.

Mean, 8 a. m., 63.7 degrees.

Mean, 8 p. m., 66.8 degrees.

Mean annual, 67.1 degrees.

The average annual temperature, of Charleston, S. C., for 20 years, is 66.1 degrees. For the months: January, 50.0 degrees; February 53.2; March, 57.1; April, 64.8; May, 73.0; June, 79.6; July, 82.1; August, 80.7; September, 76.0; October, 67.1; November, 58.0; December, 51.3.

Highest, 99, July 1.

Lowest, 19, January 28.

Annual range in temperature, 80.

Greatest daily range, 23, January 10.

Least daily range, 3, March 23.

Greatest monthly range, 52, in January.

Least monthly range, 23, in August.

Mean monthly range, 35.

Mean daily range, 13.

Number of days on which temperatures were above 90: 23 days; in May, 2 days; June, 10; July, 5; August, 6; September, 0.

The average number of days on which temperatures were above 90, at Charleston, S. C., for 20 years, is 6. For the months: June. 2 days; July, 13; August, 5; September, 1.

Number of days on which temperatures were below 32: 5 days; in January, 5 days; February, 0; December, 0.

The average number of days on which temperatures were below 32, at Charleston, S. C., for 20 years, is 2 days. For the months: January, 3 days; February, 1; November, 1; December, 2.

Last ice formed winter of 1896-1897: January 31, 1897.

First ice formed winter of 1897-1898: January 2, 1898.

MOISTURE.

Mean dew-point, 8 a. m., 56 degrees.

Mean dew-point, 8 p. m., 58 degrees.

Mean annual dew-point, 57 degrees.

The average annual dew-point, of Charleston, S. C., for 10 years, is 58 degrees. For the months: January, 43 degrees; February, 47; March, 47; April, 55; May, 63; June, 70; July, 74; August, 73; September, 69; October, 60; November, 50; December, 45.

Mean relative humidity, 8 a. m., 77 per cent.

Mean relative humidity, 8 p. m., 74 per cent.

Mean annual relative humidity, 75 per cent.

The average annual relative humidity of Charleston, S. C., for 20 years, is 75 per centum. For the months: January, 77 per cent.; February, 75; March, 72; April, 72; May, 73; June, 75; July, 76; August, 78; September, 78; October, 76; November, 76; December, 76.

Mean vapor pressure, 8 a. m., 0.492 inch.

Mean vapor pressure, 8 p. m., 0.529 inch.

Mean annual vapor pressure, 0.510 inch.

WEATHER.

Mean cloudiness, (scale 0 to 10 tenths), 8 a. m., 5.0 tenths.

Mean cloudiness, 8 p. m., 4.9 tenths.

Mean annual cloudiness, 4.9 tenths.

The average annual cloudiness, of Charleston, S. C., for 20 years, is 4.6 tenths. For the months: January, 4.9 tenths; February, 4.9;

March, 4.4; April, 4.2; May, 4.2; June, 5.1; July, 5.1; August, 5.1; September, 4.9; October, 3.7; November, 4.2; December, 4.3.

Greatest monthly cloudiness, 6.4 tenths, in March.

Least monthly cloudiness, 3.0 tenths, in May.

There were 119 clear days, distributed as follows: January, 12 days; February, 8; March, 6; April, 16; May, 20; June, 4; July, 6; August, 7; September, 11; October, 7; November, 15; December, 7.

The average annual number of clear days, of Charleston, S. C., for 20 years, is 135 days. For the months: January, 9 days; February, 11; March, 12; April, 13; May, 12; June, 8; July, 9; August, 10; September, 11; October, 14; November, 13; December, 13.

There were 177 partly cloudy days, distributed as follows: January, 13 days; February, 10; March, 14; April, 10; May, 10; June, 23; July, 23; August, 18; September, 14; October, 15; November, 12; December, 15.

The average annual number of partly cloudy days, of Charleston, S. C., for 20 years, is 138 days. For the months: January, 11 days; February, 9; March, 11; April, 11; May, 14; June, 13; July, 15; August, 13; September, 11; October, 10; November, 10; December, 10.

There were 69 cloudy days, distributed as follows: January, 6 days; February, 10; March, 11; April, 4; May, 1; June, 3; July, 2; August, 6; September, 6; October, 9; November, 3; December, 9

The average annual number of cloudy days, of Charleston, S. C., for 20 years, is 92. For the months: January, 10 days; February, 8; March, 8; April, 6; May, 6; June, 8; July, 7; August, 9; September, 9; October, 6; November, 8; December, 7.

WIND.

Prevailing direction, northeast, 17 per cent.

Total annual movement, 92,075 miles.

The average annual movement of wind, of Charleston, S. C., for 20 years, is 68,535 miles. For the months: January, 5,664 miles; February, 5,451; March, 6,231; April, 6,132; May, 6,412; June, 5,873; July, 5,686; August, 5,363; September, 5,622; October, 5,604; November, 5,201; December, 5,296.

Greatest monthly movement, 9,095 miles, in October.

Least monthly movement, 6,218, in August.

Greatest daily movement, 762, September 21.

Latest daily movement, 90, January 14.

Highest velocity, 56 miles per hour, from the southeast, February 6.

Number of times the wind was observed blowing (at 8 a. m., and 8 p. m.,) from the N., 101 timmes, or 14 per cent.; N. E., 124, or 17 per cent.; E. 75, or 10 per cent.; S. E., 55, or 8 per cent.; S., 91, or 12 per cent.; S. W., 123 or 17 per cent.; W., 100, or 14 per cent.; N. W., 61, or 8 per cent.; calms, none, (0.)

The average annual percentage of the wind-direction, of Charleston, S. C., for 20 years, are: N., 11 per cent.; N. E., 15; E., 13; S. E., 7; S., 10; S. W., 22; W., 11; N. W., 7; calms, 4.

The average hourly wind-velocity, for the year 1897, is 10.5 miles per hour. The mean hourly values, for the same period, are 1 a. m., 9.3 miles; 2 a. m., 9.0; 3 a. m., 9.1; 4 a .m., 9.1; 5 a .m., 9.2; 6 a. m., 9.2; 7 a. m., 9.3; 8 a. m., 9.7; 9 a. m., 10.6; 10 a. m., 10.9; 11 a. m., 11.4; 12 noon. 11.7; 1 p. m., 12.4; 2 p. m.. 12.8; 3 p. m., 13.2; 4 p. m., 13.0; 5 p. m., 12.5; 6 p. m., 11.5; 7 p. m., 10.6; 8 p. m., 10.0; 9 p. m., 9.6; 10 p. m., 9.7; 11 p. m., 9.5; 12 midnight, 9.2.

The average annual hourly wind-velocity, of Charleston, S. C., for 10 years, is 7.8 miles. Mean hourly values: 1 a. m., 6.5 miles; 2 a. m., 6.4; 3 a. m., 6.4; 4 a. m., 6.3; 5 a. m., 6.3; 6 a. m., 6.4; 7 a. m., 6 6; 8 a. m., 7.0; 9 a. m., 7.8; 10 a. m., 8.2; 11 a. m., 8.7; 12 noon, 9.2; 1 p. m., 9.9; 2 p. m., 10.3; 3 p. m., 10.6; 4 p. m., 10.5; 5. p. m., 10.2; 6 p. m., 9.2; 7 p. m., 8.0; 8 p. m., 7.2; 9 p. m., 6.9; 10 p. m., 6.7; 11 p. m., 6.7; 12 midnight, 6.6.

PRECIPITATION.

Total rainfall, (melted snow, sleet and hail, included,) 50.65 inches.

Total depth of snowfall, none.

Greatest monthly rainfall, 9.42 inches, in July.

Least monthly rainfall, 0.50 inch, in November.

Greatest rainfall in any 24 consecutive hours, 5.30 inches, October 18 and 19.

The average annual precipitation, of Charleston, S. C., for 20 years, is 56.85 inches. For the months: January, 4.07 inches; February, 3.46; March, 4.01; April, 4.06; May, 4.06; June, 5.28; July, 7.40; August, 7.31; September, 6.09; October, 4.36; November, 3.26; December, 3.49.

There were 126 "rainy" days, (or days on which 0.01 inch, or more, of precipitation occurred,) distributed as follows: January, 7 days; February, 12; March, 15; April, 11; May, 5; June, 14; July, 16; August, 15; September, 8; October, 7; November, 7; December, 9.

The average annual number of "rainy" days, of Charleston, S. C., for 20 years, is 120. For the months: January, 11 days; February, 10; March, 10; April, 8; May, 9; June, 11; July, 12; August, 13; September, 11; October, 8; November, 8; December, 9.

There were 69 thunderstorms, distributed as follows: January, 0 days; February, 1; March, 2; April, 5; May, 3; June, 18; July, 17; August, 15; September, 6; October, 2; November, 0; December, 0.

The average annual number of thunderstorms, of Charleston, S. C., for 20 years is 39. For the months: January, 1; February, 1; March, 1; April, 2; May, 4; June, 8; July, 9; August, 7; September, 3; October, 1; November, 1; December, 1.

The last frost occurred March 28.

The first frost occurred November 13.

L. N. JESUNOFSKY,
Local Forecast Official.

Charleston, S. C., January 24, 1898.

Deaths from Certain Zymotic Diseases in Thirty-three Years—From 1865 to 1897, Inclusive.

Causes of Death.	1865		1866		1867		1868		1869		1870		1871		1872		1873		1874		1875		1876	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Smallpox	11	127	27	239	....	....	....	....	....	....	....	....	....	....	1	6	8	98	3	18	....	....	..	1
Measles	9	30	....	....	....	....	....	....	21	14	3	4	....	....	5	4	....	....	....	....	3	10	1	2
Scarlet fever	2	....	....	3	....	....	1	....	1	....	1	....	....	....	....	....	....	....	1	1	10	7	5	....
Diphtheria	21	20	12	11	8	2	7	1	3	4	2	....	2	1	3	3	6	3	103	35	63	21	102	23
Croup	8	7	10	10	3	3	6	4	2	2	....	3	5	....	....	2	6	2	11	6	2	4	8	1
Whooping cough	19	54	2	11	2	2	....	....	....	....	10	20	9	11	....	....	....	....	....	....	1	5	....	....
Typhoid fever	31	85	21	34	11	40	11	16	17	25	22	21	19	15	9	30	13	18	16	25	20	25	19	38
Typhus fever	2	5	1	1	....	1	2	1	1	3	....	....	....	....	....	1	....	1	....	2	1	....	....	....
Malarial fevers	20	43	17	11	17	30	12	14	4	10	6	8	8	15	3	4	6	8	7	7	5	3	15	8
Puerperal fever	1	....	3	3	1	....	1	....	2	7	2	7	2	16	4	6	2	5	4	6	1	5	2	7
All diarrhœal diseases	83	324	47	51	49	85	32	78	40	79	37	116	36	67	47	92	40	58	39	40	44	58	27	70
Cerebro-spinal meningitis	....	....	....	....	....	....	1	1	4	1	....	3	1	2	2	2	3	2	6	2	5	2	4	1
Yellow fever	....	....	1	....	....	....	....	....	....	....	....	....	190	23	....	....	....	....	37	3	....	....	29	1
Totals	210	695	154	374	91	163	73	115	95	146	83	182	272	150	74	150	84	195	227	145	155	140	212	152
Consumption	26	74	53	75	41	85	47	77	38	94	47	134	53	135	64	145	54	139	29	59	54	132	54	195

Deaths from Certain Zymotic Diseases in Thirty-three Years—From 1865 to 1897.—Continued.

Causes of Death.	1877		1878		1879		1880		1881		1882		1883		1884		1885		1886		1887		1888	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Measles	....	....	8	8	....	1	....	4	2	....	....	....	....	1	4	5	....	....	....	....	8	11	2	4
Scarlet fever	....	....	1	....	....	....	....	....	81	35	10	3	....	3	....	....	7	2	....	....	....	....	....	....
Diphtheria	48	18	15	16	25	12	2	7	15	10	17	7	10	6	22	6	4	4	16	5	18	3	15	6
Croup	5	4	5	2	1	4	4	....	3	1	4	2	8	2	1	2	2	2	1	1	4	5	4	2
Whooping cough	3	13	5	15	1	2	3	27	....	....	21	59	1	1	1	....	2	10	19	27	1	2	3	26
Typhoid fever	15	22	14	29	10	22	25	31	22	35	15	38	22	34	22	21	12	17	9	26	13	30	12	24
Typhus fever	....	....	....	....	....	2	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....
Malarial fevers	6	11	9	12	6	5	4	9	9	12	12	18	16	18	20	27	9	26	14	44	8	23	6	21
Puerperal fever	....	3	4	6	3	1	....	5	4	3	1	7	....	6	4	10	5	11	2	4	2	3	1	6
All diarrhœal diseases	21	68	34	43	34	64	34	47	45	87	28	57	37	90	55	74	37	69	51	108	54	110	52	140
Cerebro-spinal meningitis	3	3	3	1	2	7	....	3	3	2	1	8	2	4	7	4	2	2	3	1	2	1	5	1
Yellow fever	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Totals	101	142	98	132	82	120	72	133	184	185	109	199	97	165	136	150	80	143	115	216	110	187	100	230
Consumption	57	167	55	165	55	165	53	196	60	192	72	206	63	203	58	212	51	209	59	202	46	198	37	193

Deaths from Certain Zymotic Diseases in Thirty-three Years—From 1865 to 1897.—Concluded.

Causes of Death.	1889		1890		1891		1892		1893		1894		1885		1896		1897		Totals.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Smallpox	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	60	489
Measles	8	4	5	....	5	9	....	....	....	....	....	....	....	....	5	15	....	....	89	126
Scarlet fever	....	....	....	....	....	....	....	....	1	....	3	....	2	....	....	....	5	1	131	55
Diphtheria	3	1	1	1	2	1	4	....	2	1	1	1	3	1	5	2	....	....	560	232
Croup	1	1	....	3	....	....	1	....	1	2	....	....	3	....	3	....	2	....	114	77
Whooping cough	2	1	5	14	5	3	10	10	4	5	3	8	....	1	3	28	2	13	138	368
Tyhoid fever	12	28	19	37	10	18	14	13	4	20	6	18	18	15	14	30	14	26	511	907
Typhus fever	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8	18
Malarial fevers	6	32	6	23	3	19	10	34	18	34	13	24	11	27	11	24	13	28	330	632
Puerperal fever	1	5	....	4	2	4	3	2	1	4	2	4	2	8	2	7	1	4	66	169
All diarrhœal diseases	83	202	48	131	69	165	70	188	85	188	50	197	73	233	57	171	47	139	1,585	3,689
Cerebro-spinal meningitis	2	2	1	....	1	3	....	2	2	3	3	2	8	3	10	11	5	17	91	96
Yellow fever	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	257	27
Totals	118	276	85	213	97	222	112	249	118	257	82	254	120	288	111	288	89	228	3,940	6,885
Consumption	43	213	45	159	41	203	44	178	40	196	44	180	39	194	45	243	26	158	1,596	5,376

Annual Meteorological Summary for the Year Ending December 31, 1897, of Charleston, S. C.—U. S. Department of Agriculture, Weather Bureau, Charleston, S. C., January 24, 1898. [Compiled for the City Board of Health.]

Latitude N. 32° 47′. Longitude W., 79° 56′. Observations made on 75th Meridian time. Local time is 20 minutes slower than 75th Meridian time.

Months. 1897.	Pressure.						Temperature.											
	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	20-year Normal.	Highest.	Lowest.	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	20-year Normal.	Mean Max.	Mean Min.	Mean Daily Range.	Highest.	Lowest.	Monthly Range.	Days above 90°.	Days below 32°.
January	30.18	30.16	30.17	30.13	30.46	29.82	43.0	47.9	47.4	50.0	54 5	40.4	14.2	71	19	52	0	1
February	30.08	30.05	30.06	30.08	30.61	29.71	50.9	54.8	55.0	53.2	61.8	48.9	12.1	74	38	36	0	0
March	30.13	30.10	30.11	30.01	30.55	29.72	57.8	60.6	60.8	57.1	67.5	54.2	13.4	86	41	45	0	0
April	30.12	30.09	30.11	29.99	30.53	29.69	62.3	64.6	65.6	64.8	71.6	59.1	12.0	82	49	33	0	0
May	30.03	29.99	30.01	29.97	30.31	29.59	69.2	72.2	72.2	73.0	79.0	65.5	13.4	92	53	39	2	0
June	30.00	29.98	29.99	29.98	30.16	29.85	78.2	79.6	80.4	79.6	86.7	74.0	12.7	96	68	28	10	0
July	30.01	29.98	30.00	29.98	30.25	29.69	79.9	81.1	81.6	82.1	87.3	75 9	11.3	99	71	28	5	0
August	30.03	30.00	30.02	29.98	30.17	29.76	78.4	80.2	81.2	80.7	86.8	75.5	11.4	94	71	23	6	0
September	30.11	30.09	30.10	30.00	30.26	29.57	72.2	75.4	75.4	76.0	80.7	70.0	10.7	90	56	34	0	0
October	30.06	30.03	30.04	30.03	30.35	29.72	65.8	69.9	69.6	67.1	75.0	64.3	10.7	84	55	29	0	0
November	30.19	30.16	30.18	30.07	30.45	29.73	56.6	61.5	61.8	58.0	69.3	54.4	14.8	80	42	38	0	0
December	30.15	30.14	30.14	30.11	30 46	29.75	49.6	54.3	54.0	51.3	61.3	46.7	14.5	72	39	33	0	0
Averages	30.09	30.06	30.08	30.03	.....	.....	63.7	66.8	67.1	66.1	73.4	60.8	12.6	.....	.....	35	23	*1

*Total.

Annual Meteorological Summary for the Year Ending December 31, 1897, of Charleston, S. C.—U S. Department of Agriculture, Weather Bureau, Charleston, S. C., January 24, 1898. [Compiled for the City Board of Health.]—Continued.

Latitude N., 32° 47′. Longitude W., 79° 56′. Observations made on 75th Meridian time. Local time is 20 minutes slower than 75th Meridian time.

Months. 1897.	Dewpoint.				Relative Humidity.				Vapor Pressure.			Precipitation.			Cloudiness.				Wind.					
	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	10-year Normal.	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	20-year Normal.	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	Total.	20-year Normal.	Greatest in 24 hrs.	Mean, 8 A. M.	Mean, 8 P. M.	Monthly Mean.	20-year Normal.	Total Movement (in Miles.)	Total Movement in Miles, 20-year Normal.	Max. Velocity.	Direction at Max. Velocity.	Prevailing Direction.	Prevailing Direction, 20-year Normal.
January	34	38	36	43	72	69	70	77	0.217	0.247	0.232	0.84	4.07	0.40	5.6	4.6	4.9	4.9	6,379	5,664	30	N. E.	N. E.	N.
February	45	46	46	47	82	74	78	75	0.320	0.324	0.322	7.61	3.46	2.82	5.8	5.3	5.7	4.9	8,015	5,451	56	S. E.	S. W.	S. W.
March	51	54	52	47	79	80	69	72	0.393	0.432	0.412	4.38	4.01	1.79	6.4	7.0	6.4	4.4	8,600	6,231	38	N. E.	S. W.	S. W.
April	55	57	56	55	79	78	78	72	0.443	0.478	0.460	1.89	4.06	0.48	5.1	3.7	3.9	4.2	8,733	6,132	44	N. E.	S.	S. W.
May	59	61	60	63	70	69	70	73	0.511	0.547	0.529	1.20	4.06	0.52	2.9	2.8	3.0	4.2	8,558	6,412	34	W.	S.	S. W.
June	70	72	71	70	77	79	78	75	0.737	0.792	0.764	5.47	5.29	1.50	4.6	6.5	5.0	5.1	6,902	5 873	44	N. W.	S. W.	S. W.
July	70	71	71	74	74	72	73	76	0.748	0.763	0.756	9.42	7.40	3.29	4.7	5.8	4.9	5.1	6,285	5,686	34	N. W.	S. W.	S. W.
August	71	73	72	73	78	79	78	78	0.755	0.811	0.783	7.34	7.31	2.25	5.5	6.0	5.6	5.1	6,218	5,363	36	S. E.	S. W.	S. W.
September	65	68	66	69	78	78	78	78	0.625	0.694	0.660	2.61	6.09	1.49	3.4	5.1	4.6	4.9	8,983	5,622	50	N.	N. E.	N. E.
October	59	62	61	60	80	77	78	76	0.512	0.569	0.540	7.04	4.36	5.30	5.6	4.3	5.5	3.7	9,095	5,604	41	N. E.	N.	N. E.
November	48	49	49	50	74	66	70	76	0 354	0.376	0.365	0.50	3.21	0.30	4.1	2.9	3.8	4.2	7,454	5,201	34	S.	N. E.	N. E.
December	43	44	44	45	78	71	75	76	0.292	0.312	0.302	2.35	3.49	1.59	5.9	4.7	5.7	4.3	6,853	5,296	33	N. W.	N.	N. E.
Averages	56	58	57	58	77	74	75	75	0.492	0.529	0.510	*50.65	*56.81	.....	5.0	4.9	4.9	4.6	*92,075	*68,535	....	.....	S. W.	S. W.

*Total.

Annual Meteorological Summary for the Year Ending December 31, 1897, of Charleston, S. C.—U. S. Department of Agriculture, Weather Bureau, Charleston, S. C., January 24, 1898. [Compiled for the City Board of Health.]—Continued.

Latitude N., 32° 47′. Longitude W., 79° 56′. Observations made on 75th Meridian time. Local time is 20 minutes slower than 75th Meridian time.

Months. 1897.	Wind.																							
										Mean Hourly Velocity (in Miles) at													
	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.	Calms.	1 A. M.	2 A. M.	3 A. M.	4 A. M.	5 A. M.	6 A. M.	7 A. M.	8 A. M.	9 A. M.	10 A. M.	11 A. M.	12 Noon.	1 P. M.	2 P. M.	3 P. M.
January	12	14	5	3	2	7	9	10	0	8.3	8.2	8.1	8.3	8.1	8.3	8.1	7.8	8.1	8.5	8.4	8.5	9.6	9.6	10.2
February	9	9	5	3	1	14	10	5	0	11.5	10.4	10.4	10.5	11.1	10.9	11.0	10.7	11.9	12.1	12.7	13.2	13.2	14.6	15.3
March	8	13	4	4	5	15	10	3	0	9.0	8.6	8.5	8.9	8.5	9.1	9.4	9.5	11.6	12.6	14.6	14.3	15.1	14.4	15.1
April	7	9	10	6	15	8	1	4	0	9.8	10.1	10.6	10.3	9.8	9.6	9.9	11.5	13.3	13.9	13.9	13.9	14.4	15.5	15.5
May	8	7	7	5	14	10	9	2	0	10.4	9.6	9.6	9.5	9.6	9.7	10.3	11.6	12.7	12.0	12.5	12.7	13.6	14.5	14.9
June	4	2	10	4	11	18	7	4	0	7.8	7.5	6.7	6.7	7.3	6.9	7.6	8.5	9.4	9.5	9.8	10.4	11.5	12.0	12.8
July	2	7	4	8	11	10	15	5	0	7.3	6.6	6.8	6.0	6.2	6.7	6.9	7.0	7.1	8.0	8.6	9.0	10.5	11.3	12.2
August	4	2	5	8	9	15	16	3	0	6.7	6.7	6.4	6 6	6.6	6.5	6.4	7.1	7.8	7.9	8.4	9.0	10.1	10.8	11.5
September	7	23	11	5	4	2	5	3	0	10.4	10.4	11.0	11.6	11.4	11.4	12.0	11.9	12.6	13.2	13.3	14.0	14.4	15.3	14.9
October	18	15	9	2	6	3	3	6	0	11.4	11.4	11.3	11.6	11.6	11.6	11.5	11.8	12.5	13.0	13.4	13.4	13.3	14.0	14.9
November	10	11	3	4	9	11	7	5	0	9.8	9.6	9.9	10..	9.9	10.1	9.7	10.1	10.6	10.5	11.1	11.7	12.1	11.9	11.9
December	12	12	2	3	4	10	8	11	0	8.8	9.4	9.7	9.5	9.9	9.1	8.9	9.0	9.6	10.1	10.2	10.5	10.6	9.9	9.7
Averages	*101	*124	*75	*55	*91	*123	*100	*61	*0	9.3	9.0	9.1	9.1	9.2	9.2	9.3	9.7	10.6	10.9	11.4	11.7	12.4	12.8	13.2

*Total.

Annual Meteorological Summary for the Year Ending December 31. 1897, of Charleston, S. C.—U. S. Department of Agriculture, Weather Bureau, Charleston, S. C., January 24, 1898. [Compiled for the City Board of Health.]—Concluded.

Latitutde N., 32° 47′. Longitude W., 79° 56′. Observations made on 75th Meridian time. Local time is 20 minutes slower than 75th Meridian time.

Months. 1897.	Wind. Mean Hourly Velocity (in Miles) at 4 P. M.	5 P. M.	6 P. M.	7 P. M.	8 P. M.	9 P. M.	10 P. M.	11 P. M.	12 Midnight.	Monthly Mean.	10-year Normal.	Number of Days. Clear.	Clear, 20-year Normal.	Partly Cloudy.	Partly Cloudy, 20-year Normal.	Cloudy.	Cloudy, 20-year Normal.	Rainy.	Rainy, 20-year Normal.	Thunder Storms.	Thunder Storms, 20-year Normal.	Snow.	Hail.	Fog.	Auroras.
January	9 9	9.2	8.1	7.7	7.9	8.0	8.8	9.1	9.0	8.6	7.8	12	9	13	11	6	10	7	11	0	1	0	0	3	0
February	14.9	14.0	12.9	11.1	10 9	10.7	11.0	10.7	10.6	11.9	8.1	8	11	10	9	10	8	12	10	1	1	0	0	5	0
March	15.0	14.9	13.5	12.2	11.9	11.1	10.4	10.1	9.2	11 6	8.4	6	12	14	11	11	8	15	10	2	1	0	0	5	0
April	15.2	15.1	14.2	12.6	11.2	10.8	10.5	10.0	9.5	12.1	8.4	16	13	10	11	4	6	11	8	5	2	0	0	0	0
May	14 4	14.1	13.2	11.8	9.9	9.9	10.3	9.9	9.3	11.5	8.4	20	12	10	14	1	6	5	9	3	4	0	0	0	0
June	12.9	12.8	12.1	10.9	11.2	10.5	8.9	8.4	8.1	9.6	8.2	4	8	23	13	3	8	14	11	18	8	0	0	1	0
July	11.8	11.5	10.6	9.7	8.9	7.7	8.0	7.1	7.3	8.4	7.7	6	9	23	15	2	7	16	12	17	9	0	0	0	0
August	11.7	10.9	9.8	10.1	8.8	7.9	8.0	8.0	7.0	8.4	7.2	7	10	18	13	6	9	15	13	15	7	0	0	1	0
September	15.1	14.7	14.0	12.6	11.5	11.1	10.9	11.1	10.7	12.5	7.8	11	11	14	11	5	9	8	11	6	3	0	1	1	0
October	14.5	13.3	11.5	10.5	10.5	10.6	11.6	12.0	12.1	12.2	7.6	7	14	15	10	9	6	7	8	2	1	0	0	3	0
November	11.7	11.2	9.7	9.6	9.3	9.0	9.5	9.7	9.7	10.4	7.0	15	13	12	10	3	8	7	8	0	1	0	0	1	0
December	9.2	8.8	8.4	8.1	8.1	8.5	8.6	8.4	8.4	9.2	7.3	7	13	15	10	9	7	9	9	0	1	0	0	4	0
Averages	13.0	12.5	11.5	10.6	10.0	9.6	9.7	9.5	9.2	10.5	7.8	*119	*135	*177	*138	*69	*92	*126	*120	*69	*39	*0	*1	*24	*0

*Total.

L. N. JESUNOFSKY, Local Forecast Official.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

AIKEN.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Typhoid										1			
Influenza				1									
Erysipelas										1			
Tuberculosis—Consumption				2	2	3					3		
Tuberculosis of Lungs											1		
Tuberculosis of Intestines						1							
Class II.													
Constitutional Diseases.													
Dropsy				1									
Class III.													
Diseases of Blood and Circulatory Organs.													
Heart—Valvular Diseases									1				
Heart—Paralysis of					1								
Scrofula									1				
Class IV.													
Respiratory Organs.													
Bronchitis	1												
Pneumonia—Broncho											1		
Congestion of Lungs						1							
Class V.													
Nervous System.													
Brain—Congestion of				1	1			1					
Paralysis					1								
Convulsions								1		2			
Class VI.													
Digestive System.													
Diarrhœa									1				
Class VII.													
Urinary Diseases.													
Uræmio							3						
Class IX.													
Developmental Diseases.													
Congenital Deformity											1		
Class X.													
Nutritional Diseases.													
Old Age							1						
Class XI.													
Deaths from Violence. Order 1.—Accidental.													
Crush				1									
Causes not Stated							1			2			

Month.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April	3	1	..	..	3	1	1	..	..	..	..	..	9	..	..	..	..	..	..	..
May	1	1	..	..	2	2	..	..	..	..	..	..	6	..	..	..	..	..	..	..
June	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
July	..	..	..	..	4	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
August	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
September	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	2
October	3	..	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
November	4	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	12	5	..	..	15	10	3	1	..	..	..	..	..	..	..	..	2	..	2	3

Month.	Births.				Still.	Permature.	Contagious Diseases.					*Water Supply.		
	White.		Col'red.											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January	..	..	..	..	1	1	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..	..	..	..	..
March	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April	..	..	..	..	3	..	..	..	..	..	..	..	..	..
May	..	..	..	..	1	..	..	..	..	..	..	..	..	..
June	..	..	..	..	..	..	..	..	..	..	..	..	..	..
July	..	..	..	..	..	..	..	..	..	..	..	..	..	..
August	..	..	..	..	..	..	..	..	..	..	..	..	..	..
September	..	..	..	..	..	..	..	..	..	..	..	..	..	..
October	..	..	..	..	1	..	..	..	..	..	..	..	..	..
November	..	..	..	..	..	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	6	1	..	..	..	..	..	..	..	..

*Artesian.

Estimated population, 1895, 2,500. Total area of the city, square miles, 4.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

ANDERSON.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I. Infectious Diseases.													
Fever—Typhoid									1				
Fever—Malarial									1				
Influenza				1									
Septicæmia		1											
Tuberculosis-Consumption							5	2		2			
Tuberculosis of Lungs			2		3								
Class III. Diseases of Blood and Circulatory Organs.													
Anæmia Pernicious							1						
Heart—Valvular Disease							1						
Heart—Paralysis of				1									
Class IV. Respiratory Organs.													
Laryngitis—Spasmodic			1										
Bronchitis										1			
Pneumonia—Croupous			1					1					
Pneumonia—Catarrhal		1											
Hemorrhage of Lungs				1									
Class V. Nervous System.													
Cerebritis										1			
Brain—Embolism of			1										
Brain—Softening of						1							
Epilepsy											1		
Meningitis—Cerebral					1								
Paralysis			1						1				
Convulsions			1		1								
Class VI. Digestive System.													
Gastro Enteritis						1	3	1					
Diarrhœa						1				1			
Hemorrhage of Stomach					1								
Cirrhosis of Liver						1							
Class VIII. Diseases of Women.													
Puerperal Fever		1											
Class X. Nutritional Diseases.													
Inanition									1				
Gangrene			1										
Class XI. Deaths from Violence. Order 1.—Accidental.													
Scalds						1							
Cause not stated		9	1	1	4	1	17	2	2	1			
Order 3.—Suicidal.													
Poison			1				1						

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

ANDERSON.—Continued.

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
February	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
March	2	..	..	..	3	5	..	..	..	..	..	..	9	..	..	1	..	..	..	..
April	1	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	1	..	1	2
May	1	2	3	..	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
June	2	2	..	..	..	2	..	..	..	..	..	..	5	..	1	..	4	1	..	1
July	9	3	1	2	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
August	1	1	..	2	2	..	..	..	..	..	..	..	..	..	..	..	3	1	1	1
September	2	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
October	1	..	1	..	2	3	..	..	..	..	..	..	..	..	..	..	2	2	..	3
November	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	19	9	6	5	13	16	2	..	..	..	..	..	..	..	..	..	10	4	2	7

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	..	..	..	..	..	1	..	..	..	..	..	..	..	..
February	3	3	2	2	..	..	..	..	..	..	..	..	..	..
March	6	1	3	1	3	..	..	..	..	..	..	..	..	..
April	2	1	2	3	1	..	..	..	..	..	..	..	..	..
May	..	5	..	..	..	..	..	..	..	..	..	..	..	..
June	2	3	1	1	1	..	..	..	..	..	..	..	..	..
July	6	..	..	3	..	..	..	..	..	..	..	..	..	..
August	5	..	..	1	..	..	..	..	..	..	..	..	..	..
September	1	3	..	..	..	..	..	..	..	..	..	..	..	..
October	1	2	..	..	..	..	..	..	..	..	..	..	..	..
November	..	..	..	..	..	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	26	18	8	11	5	1	..	..	..	..	..	..	..	..

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Kge, Months, Accompanied by Statement Of Sanitary Condition, Water Supply and Public Improvements.

BELTON.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class XI.													
Deaths from Violence.													
Order 1.—Accidental.													
Cause not known	....	....	....	2	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																	1	1		
May																				
June																				
July																				
August																				
September																				
October																				
November																				
December																				
Total																	1	1		

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

BELTON.—Continued.

Months.	Births.				Still.	Premature.	Contagious Diseases.					* Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February	3													
March														
April														
May														
June														
July														
August														
September														
October														
November														
December														
Total	3													

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

BEAUFORT.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid									1	1			
Fever—Malarial										1			
Tuberculosis—Consumption									4	2			
Class IV. Respiratory Organs.													
Pneumonia—Broncho									1				
Class V. Nervous System.													
Paralysis									1				
Class VI. Digestive System.													
Diarrhœa										2			
Class VII. Urinary Diseases.													
Bright Disease									1				
Class XI. Deaths from Violence. Order 2—Homicidal.													
Gunshot—Wound									1				

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August																				
September																	2		4	2
October	1	1		2	2	1											2		1	4
November																				
December																				
Total	1	1		2	2	1											4		5	6

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January														
February														
March														
April														
May														
June														
July														
August														
September	2	1	2	4										
October	1		2	1										
November														
December														
Total	3	1	4	5										

No. of bodies received for interment from elsewhere 1.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

BLACKVILLE.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I. Infectious Diseases.													
Fever—Malarial	....	....	....	....	....	....	....	1	....	....	....	....	....
Class III. Diseases of Blood and Circulatory Organs.													
Anæmia Simple	....	....	....	....	....	1	....	....	....	....	....	....	....
Heart—Valvular Disease	....	....	....	....	1	1	....	....	....	....	....	....	....
Class IV. Respiratory Organs.													
Pneumonia—Broncho	1	1	....	....	....	....	....	....	....	....	....	....	....
Class V. Nervous System.													
Paralysis	....	....	....	....	....	....	....	....	....	....	1	....	....
Convulsions	....	....	....	....	1	....	....	....	....	....	....	....	....
Class VI. Digestive System.													
Peritonitis	....	....	....	....	1	....	....	....	....	....	....	....	....
Carcinoma of Liver	....	....	....	....	....	1	....	....	....	....	....	....	....
Class VII. Urinary Diseases.													
Cystitis	....	....	....	....	....	....	....	....	....	1	....	....	....
Class VIII. Diseases of Women.													
Childbirth	....	....	1	....	....	....	....	....	....	....	....	....	....
Class X. Nutritional Diseases.													
Marasmus	....	....	....	....	....	....	....	....	1	1	....	....	....
Asthenia	....	....	....	....	....	....	....	....	1	....	1	....	....
Inanition	....	....	....	....	....	....	....	....	....	2	....	....	....
Class XI. Death from Violence. Order 2—Homicide.													
Gunshot—Wound	....	....	....	....	....	1	....	....	....	....	1	....	....

BLACKVILLE.—Continued.

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January						1														1
February	1																1		1	
March					1															1
April																				
May	1			1			1										1		2	
June	2				1		1										2		1	1
July																				
August				1														1		
September	2																	1		1
October	3					2											1	1	1	2
November		1			1			2									1	1	1	1
December																				
Total	9	1		2	3	3	2	2												

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diptheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January				2										
February		1	4		1									
March	1		3		2									
April	1		3	3	1									
May				1										
June			1	1										
July				2										
August														
September			1	3										
October			4	1										
November		1		1										
December														
Total	2	2	16	14	4									

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

BRANCHVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class III. Diseases of Blood and Circulatory Organs.													
Heart—Valvular Disease				1									1
Class VI. Digestive System.													
Gastro Enteritis						1							1
Appendicitis						1							1
Class XI. Deaths from Violence. Order 1.—Accidental.													
Cause Unknown						1							1

Month.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April							1					1	1				1			
May																				
June			1	1	1							1					1		1	1
July																				
August																				
September																				
October																				
November																				
December																				
Total			1	1	1		1					2	1				2		1	1

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March			1	1										
April	2			1										
May			1											
June	1		1	1	1									
July														
August														
September														
October														
November														
December														
Total	3		3	3	1									

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

BROOKLAND.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class III. Diseases of Blood and Circulatory Organs.													
Heart—Dilation of					1								1
Total					1								1

Month.	Ages.								Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May			1														1			
June																				
July																				
August																				
September																				
October																				
November																				
December																				
Total			1														1			

Length of river front, 1 mile. Number inhabited houses in city, 200.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CAMDEN.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Pyæmia	....	....	1	....	....	....	....	....	....	....	....	....	....
Class IV. Respiratory Organs.													
Bronchitis—Capillary	....	....	1	....	....	....	....	....	....	....	....	....	....
Class V. Nervous System.													
Apoplexy	1	....	....	....	....	....	....	....	....	....	....	....	....
Class XI. Deaths From Violence. Order 2—Homicidal.													
Gunshot Wound	1	....	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1-5	5-10	10-20	20-40	40-60	60-80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	....	....	....	....	....	1	1	....	....	1	....	1	....	....	....	....	2	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	1	....	1
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	3	1	....	....	1	....	1	....	....	....	....	2	1	....	1

Month.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female	Male.	Female										
January	2	2	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2	2	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Well. Estimated population 1895, 3,500. Total area of the city, square miles, 4. Area of parks, land and lake, acres, 1.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CARLISLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	....	1	....	....	....	....	....
Tuberculosis Consumption	1	....	....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of Intestines	1	....	....	....	....	....	....	....	....	....	....	....	....
Class VIII. Diseases of Women.													
Hemorrhage p'st Partum	....	....	....	1	....	....	....	....	....	....	....	....	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	2	....	....	....	....	....	....	....	....	....	....	....
May	....	....	1	....	....	....	....	....	....	....	....	....	....	....
June	....	1	....	1	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	1	3	1	....	....	....	....	....	....	....	....	....	....

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CHERAW.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Tuberculosis-Consumption					1								
Class V.													
Nervous System.													
Paralysis					1								
Class VI.													
Digestive System.													
Intestinal Obstruction					1								
Class VII.													
Urinary Diseases.													
Brights Disease					1								

Month.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																			
February																			
March																			
April																			
May			1				1										1	1	1	1
June																			
July																			
August																			
September																			
October																			
November																			
December																			
Total			1				1										1	1	1	1

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January														
February														
March														
April														
May	2	1												
June														
July														
August														
September														
October														
November														
December														
Total	2	1												

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CLEMSON.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class IV. Respiratory Organs.													
Bronchitis—Capillary	....	....	....	....	1	....	....	....	....	....	....	....	1
Pneumonia—Croupous	....	....	....	....	....	....	....	1	....	....	....	....	1
Class VI. Digestive System.													
Enteritis	....	....	....	....	1	....	....	....	....	....	....	....	1
Gastro Enteritis	1	....	....	....	....	....	....	....	1	....	....	....	2
Appendicitis	....	1	....	....	....	....	....	....	....	....	....	....	1
Total	1	1	....	....	2	....	....	1	1	....	....	....	6

Name.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January	..	1	..	..	..	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
February	..	..	..	1	..	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	2	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....
June	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	1	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....
September	..	..	..	..	..	1	....	....	....	....	1	....	....	....	....	....	1	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	2	1	..	1	1	1	....	....	....	....	1	1	....	....	....	....	4	1	1	....

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female.	Male.	Female.										
January						1								
February		1												
March						1								
April						1								
May														
June		1												
July														
August														
September	2													
October														
November														
December														
Total	2	2				3								

Estimated population, 1895, 600. Length of sewers, miles 1½. Length of water pipe, miles, 1½.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CORONACO.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class IV. Respiratory Organs.													
Pneumonia—Broncho						1							

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1–5	6–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																		1		
July																				
August																				
September																				
October																				
November																				
December																				
Total																				

Estimated population, 1895, 250. Total area of the city, square miles, 1. Number inhabited houses in city, 39.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

CLOVER.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Tuberculosis—Consumption	....	1	....	....	....	....	....	....	....	....	....	....	....
Class IV.													
Respiratory Organs.													
Pneumonia—Catarrhal	....	1	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1–5	6–10	10–20	20–40	40–60	60–80	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....
February	1	..	..	1	..	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1	..	..	1	..	....	....	....	....	1	....	1	....	....	....	....	1	1	....	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female	Male.	Female										
January														
February	1	1												
March														
April				1										
May	1													
June														
July														
August														
September														
October														
November														
December														
Total	2	1		1										

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

DARLINGTON.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Fever—Malarial	....	1	....	....	....	....	....	....	....	....	....	....	....
Tuberculosis—Consumption	....	....	1	....	....	....	....	....	....	....	....	....	....
Pneumonia—Catarrhal	....	....	1	....	....	....	....	....	....	....	....	....	....
Pneumonia—Broncho	....	1	....	1	....	....	....	....	....	....	....	....	....
Congestion of Lungs	....	1	....	....	....	....	....	....	....	....	....	....	....
Diarrhœa	....	....	....	1	....	....	....	....	....	....	....	....	....
Uræmio	....	....	....	1	....	....	....	....	....	....	....	....	....

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	1	..	1	..	1	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....
March	..	..	..	..	1	....	1	....	....	....	....	....	....	....	....	....	1	....	1	....
April	..	..	..	..	..	2	....	1	....	....	....	....	....	....	....	....	1	1	....	1
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jnne	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
N0vember	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1	..	1	..	2	2	1	1	....	....	....	....	....	....	....	....	3	3	1	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	5	2	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	2	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	1	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	6	4	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Artesian. Estimated population, 1895, 4,500.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

ELLENTON.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class IV.													
Respiratory Organs.													
Pneumonia—Croupous	1	....	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diptheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	1	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	....	....	1	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Tuberculosis—Consumption									1				
Class IV.													
Respiratory Organs.													
Pneumonia—Typhoid					1								
Class VI.													
Digestive System.													
Jaundice										1			
Class XI.													
Deaths from Violence. Order 1.—Accidental.													
Causes Unknown	1	2											

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	2	2																		1
February																				2
March																				
April																				
May																				
June																				
July																				
August																				
September					1													1		
October					1												1			
November																				
December																				
Total	2	1			2												1	1		3

Months.	Births.				Still.	Premature.	Contagious Diseases.					* Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January														
February			2											
March		1												
April		3												
May	1													
June														
July														
August														
September														
October														
November														
December														
Total	1	4	2											

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

ENOREE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class IV. Respiratory Organs.													
Laryngitis	....	....	....	....	1	....	....	....	....	....	....	....	1
Pneumonia—Croupous	....	....	....	1	....	....	....	....	....	....	....	....	1
Class VI. Digestive System.													
Entero—Colitis	....	....	....	....	1	....	....	....	....	....	....	....	1
Class VII. Urinary Diseases.													
Brights Disease	....	....	....	....	....	1	....	....	....	....	....	....	1
Total	....	....	....	1	2	1	....	....	....	....	....	....	4

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																			
February																			
March																			
April						1											1		
May	1	1																2	
June					1												1		
July																			
August																			
September																			
October																			
November																			
December																			
Total	1	1			1	1											2	2	

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April	1	2												
May	4													
June	2													
July														
August														
September														
October														
November														
December														
Total	7	2												

Estimated population 1895, 1,800. Length of river front, 1 mile. Number inhabited houses in city, 230.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Month2, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

EUTAWVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class X.													
Nutritional Diseases.													
Old Age											1		

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August																				
September	1																		1	
October								1												
November																				
December																				
Total	1							1											1	

Estimated population, 1895, 250.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

FLORENCE.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I. Infectious Diseases.													
Fever—Typhoid									1	1			
Fever—Malarial										1			
Whooping Cough					3	2							
Influenza			1										
Tuberculosis—Consumption	1		1	1	3	1	2			1			
Class II. Constitutional Diseases.													
Diabetes	1												
Class III. Diseases of Blood and Circulatory Organs.													
Heart—Paralysis of		1			1								
Class IV. Respiratory Organs.													
Pneumonia—Catarrhal	4		1		1					1			
Pneumonia—Broncho		1	1										
Hemorrhage of Lungs								1					
Class V. Nervous System.													
Apoplexy		1									1	1	
Brain—Congestion of					1								
Convulsions	1						3	1	1				
Class VI. Digestive System.													
Gastro Enteritis									1	1			
Entero—Colitis						1							
Class VII. Urinary Diseases.													
Brights Disease			1						1		1		
Uræmio								1					
Class VIII. Diseases of Women.													
Puerperal Convulsions				1									
Puerperal Fever			1							1			
Pelvic Holmatona				1									
Pyosalpingitis				1									
Class X. Nutritional Diseases.													
Inanition	3				1	3	3			1			
Not given												2	
Cause unknown					2	1		2	6	1			
Class XI. Death from Violence. Order 1.—Accidental.													
Wound—Gunshot												1	
Order 2.—Homicidal.													
Gunshot—Wound	1				1					1			

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	5	1	1	..	..	2	2	....	....	....	....	....	....	....	....	....	2	1	5	3
February	1	..	..	..	..	..	2	....	....	....	....	....	....	....	....	....	....	1	....	2
March	..	1	..	..	3	1	1	....	....	....	....	....	....	....	....	....	1	....	3	2
April	..	..	..	..	4	..	..	....	....	....	....	4	....	....	....	....	2	....	....	2
May	3	2	..	..	1	3	2	....	2	....	....	....	....	....	....	....	....	....	....	....
June	4	..	1	..	..	1	1	....	1	....	....	....	....	....	....	....	....	....	4	4
July	6	1	..	..	1	..	..	....	....	....	....	....	....	....	....	....	....	....	6	2
August	2	2	..	..	..	2	....	....	....	....	....	....	....	....	....	....	2	....	2	2
September	1	4	..	1	2	1	1	....	....	....	....	....	....	....	....	....	1	....	6	3
October	1	..	1	..	4	1	1	....	1	....	....	....	....	....	....	....	2	2	....	5
November	..	..	..	..	..	..	..	....	....	....	1	1	6	....	....	....	1	1	1	1
December	2	1	..	1	..	1	1	....	....	....	....	....	....	....	....	....	4	2	....	....
Total	25	12	3	2	15	12	11	....	4	....	1	5	6	....	....	....	15	7	27	26

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	3	..	....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	6	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	5	....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	1	1	5	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	3	4	3	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	3	4	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	2	1	2	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	1	1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	2	2	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	8	....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	7	3	7	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	36	26	27	36	5	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Artesian.

Estimated pupulation, 1895, 5,500. Area of parks, land and lake, acres, 2. Number inhabited houses in city, 1,015. Length of sewers, miles, ½. Length of water pipe, miles, 1-16. The capacity of water supply, good. Number of bodies received for interment from elsewhere, 4.

Deaths by Towns and Cities, 1898.

Sex, Nativity. Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

FORT LAWN.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	
Class I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	....	1	....	....	....	....	....
Membraneous Croup	....	....	....	....	....	....	....	1	....	....	....	....	....

Month.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August		1				1											1			1
September																				
October																				
November																				
December																				
Total		1				1											1			1

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January														
February														
March														
April														
May														
June	1									1				
July														
August														
September														
October														
November														
December														
Total	1									1				

Estimated population, 1895, 150. Total area of square miles, 2.13. Inhabited houses, 20.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

FORT MILL.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Tubercular Meningitis	....	....	....	....	....	....	....	....	....	....	1	....	....
Class IV. Respiratory Organs.													
Pneumonia—Catarrhal	....	....	....	....	....	....	....	....	....	....	1	....	....
Class V. Nervous System.													
Meningitis—Cerebral	....	....	....	....	....	....	....	....	....	....	1	....	....
Class VI. Digestive System.													
Gastritis	....	....	....	....	....	....	....	....	....	....	1	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August																				
September																				
October																				
November	2	1	1														2	2		
December																				
Total	2	1	1														2	2		

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January	2	2												
February	5	2												
March	1	4												
April	3													
May	3	1												
June														
July														
August														
September														
October	5													
November	2	5												
December														
Total	21	14												

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

FORT MOTTE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class III. Diseases of Blood and Circulatory Organs.													
Heart—Paralysis of									1				1
Class V. Nervous System.													
Paralysis						1							1
Class VII. Urinary Diseases.													
Brights Disease						1							1

Months.	Ages.								Social Condition.			Nativities.				Sex.			
	Under 1.	1-5.	5-10	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June						2	1					2							1	1
July																				
August																				
September							1										1			
October																				
November																				
December																				
Total						2	2					2					1		1	1

Estimated population, 1895, 480. Number inhabited houses 100.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GOVAN.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	....	....	....	....	1	....	....
Membraneous Croup	....	....	....	....	....	....	....	....	....	....	1	....	....
Class V. Nervous System.													
Apoplexy	....	....	....	....	....	....	....	....	....	....	....	1	....
Convulsions	....	....	....	....	....	....	....	....	....	....	....	1	....
Class X. Nutritional Diseases.													
Old Age	....	....	....	....	....	....	....	....	....	....	1	....	....
Class XI. Deaths From Violence. Order 1.—Accidental.													
Fracture of Skull	....	....	....	....	....	....	....	....	....	....	1	....	....
Order 2.—Homicidal.													
Gunshot—Wound	....	....	....	....	....	....	....	....	....	....	1	....	....

Months.	Ages.								Social Condition.			Natives.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																			
February																			
March																			
April																			
May																			
June																			
July																			
August																			
September																			
October																			
November		1		1	1		1										3		1	
December	1					1													2	
Total	1	1		1	1	1	1										3		3	

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diptheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April														
May														
June														
July														
August														
September														
October														
November	1		1	1										
December	1			1										
Total	2		1	2										

*Wells. Estimated population, 1895, 150. Total area of the city, square miles, ¼.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GREENVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid												3	
Fever—Malarial												1	
Membraneous Croup										1			
Septicæmia												1	
Tuberculosis-Consumption	1								1			2	
Tuberculosis of Lungs			2	3	5						1		
Tuberculosis—Lymph Glands					1								
Class II. Constitutional Diseases													
Diabetes	1				1								
Siphilis			1										
Class III. Diseases of Blood and Circulatory Organs.													
Anæmia Simple	2												
Heart—Dilation of				2									
Class IV. Respiratory Organs.													
Bronchitis—Capiliary			1		5								
Pneumonia—Catarrhal											1		
Pneumonia—Broncho									1		1		
Congestion of Lungs			1						2	1			
Œdema of Lungs									1				
Class V. Nervous System.													
Apoplexy											1		
Cerebritis				2									
Brain Dropsy				1	1								
Meningitis—Cerebral											1		
Meningitis—Spinal											1		
Paralyis					2							1	
Convulsions								1					
Class VI. Digestive System.													
Enteritis	1								1				
Peritonitis				1									
Sarcoma of Liver				1									
Class VII. Urinary Diseases.													
Brights Disease	1									1			
Cyttitis	1												
Class VIII. Diseases Women.													
Carcinoma of Breast	1									1			
Class IX. Dævelopmental Diseases.													
Congenital Deformity									1				
Class X. Nutritional Diseases.													
Asthenia									1				
Inantition									1	1			
Gangrene	1												

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GREENVILLE—Concluded.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class XI. Deaths from Violence. Order 1.—Accidental.													
Burns	....	....	....	1	....	....	....	....	....	....	1	1	....
Scalds	....	....	....	....	1	....	....	....	....	....	....	....	....
Wound—Gun Shot	....	1	....	....	....	....	....	....	....	....	....	....	....
Poison	....	....	....	....	....	....	....	....	1	....	....	....	....
Hydrophobia	....	....	1	....	....	....	....	....	....	....	....	....	....
Order 2—Homicidal.													
Gunshot—Wound	....	....	....	....	1	....	....	....	....	....	....	....	....
Order 3—Suicidal.													
Strangulation	....	....	1	....	....	....	....	....	....	....	....	....	....
Poison	....	....	....	....	....	....	....	....	....	....	....	2	....
Cause not Given	....	....	....	1	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Col'r'd	
																	Male.	Female.	Male.	Female.
January	3	2	..	..	..	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....
February	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
March	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
September	6	1	..	..	1	....	..	....	2	....	....	....	....	....	....	....	1	....	6	3
October	3	2	..	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
November	1	1	..	..	1	1	1	1	....	....	....	....	....	....	....	....	....	5	....	....
December	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	13	6	..	1	3	5	3	....	2	....	....	....	....	....	....	....	1	5	6	3

Months.	Births.						Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.	Still.	Premature.	Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
January						2			30					
February					2									
March														
April														
May					3	2								
June														
Juiy														
August														
September														
October														
November														
December	2	1												
Total	2	1			5	4			30					

Estimated population, 1895, 9,500. Total area of city, square miles, 4¾. Area of parks land and lake acres, 12. Length of sewers, miles, 12. Length of water pipe, miles, 22. The capacity of water supply, 1,000,000 gallons per day. No. of bodies shipped for interment to other places, 2.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GREENWOOD.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class II.													
Constitutional Diseases.													
Diabetes			1										
Class III.													
Diseases of Blood and Circulatory Organs.													
Heart—Valvular Disease				1									
Class IV.													
Respiratory Organs.													
Bronchitis			1		1								
Class V.													
Nervous System.													
Apoplexy			1										
Class VII.													
Urinary Diseases.													
Cancer of Bladder				1									
Class VIII.													
Diseases of Women.													
Miscarriage			1										
Class IX.													
Developmental Diseases.													
Spinal Befida				1									
Class X.													
Nutritional Diseases.													
Asthenia			1										
Class XI.													
Deaths from Violence. Order 1—Accidental.													
Fracture of Skull				2									

Age.	Ages.								Social Condition.			Natives.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																			
February																			
March		1			3	1	1										1	1	1	3
April	2		3			1											2	2	1	1
May	1																1			
June																				
July																				
August																				
September																				
October																				
November																				
December																				
Total	3	1	3		3	2		1									4	3	2	4

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female	Male.	Female			Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Typhoid Fever.	Well.	Cistern.	Lake Water
January														
February														
March	2		1	2										
April	3	3		1	1				1					
May		1	1	1	1	1			2					
June														
July														
August														
September														
October														
November														
December														
Total	5	4	2	4	2	1			3		2			

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GREERS.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Classs I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	2	....	....	....	....	....	....
Class III.													
Diseases of Blood and Circulatory Organs.													
Amenia—Pernicious	....	....	....	2	....	....	....	....	....	....	....	....	....
Class IV.													
Respiratory Organs.													
Pneumonia—Catahrral	....	....	....	1	....	....	....	....	....	....	....	....	....
Class VII.													
Diseases of Women.													
Puerperal Peritonitis	....	....	....	....	....	1	....	....	....	....	....	....	....

Months.	Ages.								Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April	1				1		1										1	1		1
May																				
June					1													1		
July					2							2					1	1		
August																				
September																				
October																				
November																				
December																				
Total	1				4		1					2					2	3		1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April	1	1		1	1									
May														
June														
July														
August														
September														
October														
November														
December														
Total	1	1		1	1									

Estimated population, 1,200. Total area of the city, square miles, 2.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

GROVER.

Cause of Death.	Months.												Total.
	January	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class IV. Respiratory Organs.													
Congestion of Lungs	1	....	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	3	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	3	....	....	....	....	....	....	....	....	....	....	....	....	....

*The capacity of water supply, 7,000 gallons per day. Estimated population, 1895, 1,500. Number inhabited houses in city, 50.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

HARTSVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
CLASS I. Infectious Diseases.													
Fever—Malarial							1						
CLASS IV. Respiratory Organs.													
Congestion of lungs			1										
CLASS V. Nervous System.													
Apoplexy				1									
Brain—Congestion of			1										
CLASS VI. Digestive Organs.													
Entero—Colitis	1							1					
Diarrhœa				1									
CLASS X. Nutritional Diseases.													
Old age		1											
Total	1	1	2	2			1	1					

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January				1						1							1			
February								1			1									1
March	1				1													1	1	
April		1			1															
May																				
June																				
July				1															1	
August						1						1						1		
September																				
October																				
November																				
December																				
Totals	1	1		2	2	1		1		1	1	1					1	2	2	1

HARTSVILLE—Continued.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Santtary Condition, Water Supply and Public Improvements.

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	1	1												
February														
March	1													
April														
May														
June														
July	2	1	1											
August	1													
September														
October														
November														
December														
Total	5	3	1											

Estimated population, 1895, 600.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

JONESVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
CLASS IV.													
Respiratory Organs.													
Pneumonia—Catarrhal	....	....	....	....	1	....	....	....	....	....	....	....	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases reported.	Diphtheria.	Smallpox.	Membraneous Croup	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	1	....	....	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
April	....	...	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	..	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	2	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1	2	....	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....

Estimated population, 1895, 500.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

KERSHAW.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Tuberculosis-Consumption	..	..	..	..	..	..	..	..	..	..	1	..	..
Class IV. Respiratory Organs.													
Pneumonia—Catarrhal	1	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia—Broncho	1	..	..	..	..	..	..	..	..	..	..	..	..
Class V Nervous System.													
Paralysis	..	1	..	..	..	..	..	..	..	..	..	..	..
Class VI. Digestive System.													
Diarrhœa—Chronic	..	..	..	..	..	..	..	..	1	2	..	..	..
Intestinal Obstruction	1	..	..	..	..	..	..	..	..	..	..	..	..
Class XI. Death from Violence. Order 1.—Accidental.													
Fracture of Skull	..	..	..	..	..	1	..	..	..	..	..	..	..

KERSHAW.—Continued.

Months.	Ages.									Social Condition.			Nativities.				Sex..			
																	White.		Colored	
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	1	..	1	1
February	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..
March	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
June	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..
July	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
August	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..
September	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
October	2	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..
November	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	2	..	..	2	3	1	1	..	..	3	1	2	..	..	..	..	4	2	2	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	..	1	..	1	..	..	..	..	..	..	..	..	..	..
February	1	..	1	..	..	..	..	..	..	..	..	..	..	..
March	..	..	1	1	..	..	..	..	..	..	..	..	..	..
April	4	2	1	2	..	..	..	..	..	..	..	..	..	..
May	1	1	..	..	..	..	..	..	..	..	..	..	..	..
June	..	1	..	..	..	..	..	..	..	..	..	..	..	..
July	..	1	..	..	..	..	..	..	..	..	..	..	..	..
August	..	..	1	1	1	..	..	..	..	..	..	..	..	..
September	1	1	..	1	..	..	..	..	..	..	..	..	..	..
October	..	..	..	..	..	..	..	..	..	..	..	..	..	..
November	2	..	..	1	1	..	..	..	..	..	..	..	..	..
December	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	9	7	4	7	2	..	..	..	..	..	..	..	..	..

Population, 1,300.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

LEWISDALE.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I.													
Infectious Diseases.													
Fever—Typhoid								1					
Tuberculosis—Consumption								1					
Class III.													
Diseases of Blood and Circulatory Organs.													
Heart—Valvular Disease								1					
Class VI.													
Digestive System.													
Carcinoma of Stomach								1					
Class VII.													
Urinary Diseases.													
Brights Disease								1					
Class VIII.													
Diseases of Women.													
Carcinoma of Uterus								1					

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August																	3	1	1	1
September																				
October																				
November																				
December																				
Total																	3	1	1	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female	Male.	Female			Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
January														
February					1									
March														
April														
May														
June														
July														
August	4	2			1									
September														
October														
November														
December														
Total	4	2			2									

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

LIBERTY.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I.													
Infectious Diseases.													
Tuberculosis of Intestines	...	...	...	...	...	...	...	...	1	...	...	...	...
Class VI.													
Digestive System.													
Entero—Colitis	...	...	...	...	...	1	...	...	...	...	...	...	...
Class XI.													
Deaths From Violence.													
Order 1.—Accidental.													
Internal Injury	...	...	...	...	...	...	1	...	...	...	...	...	...

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June	1																1			
July	1																1			
August																				
September					1							1						1		
October																				
November																				
December																				
Total	2				1							1					2	1		

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	1													
February														
March														
April														
May														
June														
July	3	2												
August														
September														
October		2												
November														
December														
Total	4	4												

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

LITTLE MOUNTAIN.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	1	....	....	....	....	....	....
Tuberculosis—Consumption	....	....	....	....	....	1	....	....	....	....	....	....	....
Class IV.													
Respiratory Organs.													
Pneumonia—Broncho	1	....	....	....	....	....	....	....	....	....	....	....	....
Cause unknown	1	....	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	1						1											2		
February																				
March																				
April																				
May																				
June					1												1			1
July		1																		
August																				
September																				
October																				
November																				
December																				
Total	1	1			1		1										1	2		1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.			Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January	1	1												
February														
March														
April														
May														
June	1	2		1										
July		1		2										
August														
September														
October														
November														
December														
Total	2	4		3										

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

LIVINGSTON.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	1	....	....	....	....	....	....	1
Class VIII.													
Diseases of Women.													
Miscarriage	....	....	....	....	....	1	....	....	....	....	....	....	1
Total	....	....	....	....	....	2	....	....	....	....	....	....	2

Months.	Ages.								Social Condition.			Nativities.				Sex.			
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

LIVINGSTON.—Continued.

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March	1													
April														
May														
June														
July														
August														
September														
October														
November														
December														
Total	1													

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

MARYVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
CLASS IV. Respiratory Organs.													
Bronchitis	....	....	....	....	....	....	1	....	....	....	....	....	1
CLASS X. Nutritional Diseases.													
Cause unknown	4	....	....	....	....	....	....	....	....	....	....	....	4

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	1				1		2			1	1	2								4
February																				
March																				
April																				
May																				
June																				
July							1													1
August																				
September																				
October																				
November																				
December																				
Total	1				1		3			1	1	2								5

Months.	Births.				Still.	Permature.	Contagious Diseases.					Water Supply.		
	White.		Col'red.				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April														
May														
June														
July				1										
August														
September														
October														
November														
December														
Total				1										

Estimated population, 1895, 500.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

MARION.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	1	....	....	....	....	....	....	....	....	....
Tuberculosis of Lungs	....	....	....	2	....	....	....	....	....	....	....	....	....
Tubercular Meningitis	....	....	....	....	....	....	1	....	....	....	....	....	....
CLASS II.													
Constitutional Diseases.													
Diabetes	....	....	....	....	....	....	1	....	....	....	....	....	....
Class IV.													
Respiratory Organs.													
Pneumonia—Broncho	1	....	....	....	....	....	....	....	....	....	....	....	....
Class V.													
Nervous System.													
Paralysis	....	....	....	....	....	1	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January												1							1	
February																				
March																				
April																	2	1		
May																				
June					1					1							1			
July																				
August																				
September																				
October																				
November																				
December																				
Total					1					1		1					3	1	1	

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January				1										
February														
March														
April	2	1												
May														
June														
July	3													
August														
September														
October														
November														
December														
Total	5	1		1										

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

McCORMICK.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class IV.													
Respiratory Organs.													
Bronchitis	....	1	....	....	....	....	....	....	....	....	....	....	....
Class X.													
Nutritional Diseases.													
Cause unknown	1	....	...	1	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January																		1		
February							1											1		
March																				
April																		1		
May																				
June																				
July																				
August																				
September																				
October																				
November																				
December																				
Total							1											3		

Month.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March		2												
April														
May														
June														
July														
August														
September														
October														
November														
December														
Total		2												

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

NORTH.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class V.													
Nervous System.													
Brain—Softening of								1					
Class VIII.													
Diseases of Women.													
Miscarriage								1					
Total								2					

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March																				
April																				
May																				
June																				
July																				
August								1										1	1	
September																				
October																				
November																				
December																				
Total								1										1	1	

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April														
May														
June														
July														
August	2													
September														
October														
November														
December														
Total	2													

Population, 400.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

NORWAY.

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	1	....	1	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1	....	1	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

Population, 200.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

PARKSVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	....	....	1	....	....	....	....
Fever—Malarial	....	....	....	....	....	....	1	....	....	....	....	....	....
Influenza	....	....	....	1	....	....	....	....	....	....	....	....	....
Tuberculosis—Consumption	....	....	....	....	....	....	....	....	....	1	....	....	....
Class VI. Digestive System.													
Entero—Colitis	....	....	....	....	1	....	....	....	....	....	....	....	....
Class VII. Urinary Diseases.													
Uræmio	....	....	1	....	....	....	....	....	....	....	....	....	....
Class VIII. Disease of Women.													
Puerperal Convulsions	....	....	1	....	....	....	....	....	....	....	....	....	....
Class XI. Death from Violence. Order 1.—Accidental.													
Drowning	....	....	....	....	1	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1	1–5	5–10	10–20	20–40	40–60	60–80	Over 80	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February																				
March					1	1						2						2		
April						1												1		
May	1			1													1	1		
June																				
July						1											1			
August																				
September						1											1			
October					1												1			
November																				
December																				
Total	1			1	2	4						2					4	4		

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female	Male.	Female										
January	1													
February														
March		2												
April	1					1								
May														
June														
July	1													
August														
September														
October	1													
November														
December														
Total	4	2				1								

*Well. Population, 175.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

PORT ROYAL.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	...	...	....	....	1	....	1

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	1	....	....	....	....	....	1	....	....	....	....	1	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	..	..	..	..	..	1	....	....	....	....	....	1	....	....	....	....	1	....	....	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	2	3	...	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	1	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2	4	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Estimated population, 1895, 500. Total area of the city, square miles, 3. Length of river front, miles, 3. Number inhabited houses in city, 600.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

PRINCETON.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	1	....	....	....	....	....	....	....
Class IV. Respiratory Organs.													
Œdema of Lungs	....	....	1	....	....	....	....	....	....	....	....	....	....

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	..	..	..	..	..	....	1	....	....	....	....	1	....	....	....	....	1	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	1	....	....	....	....	....	1	....	....	....	....	1	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	..	..	..	..	..	1	1	....	....	....	....	2	....	....	....	....	2	....	....	....

Months.	Births.						Contagious Diseases.					Water Supply.		
	White.		Colored											
	Male.	Female.	Male.	Female.	Still.	Premature.	Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
January														
February														
March						1								
April														
May														
June	1	1				1								
July														
August														
September														
October														
November														
December														
Total	1	1				2								

Estimated population, 1895, 250.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condit'on, Water Supply and Public Improvements.

SWANSEA.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class XI.													
Death from Violence.													
Order 1.—Accidental.													
Fracture of Skull	....	....	1	....	....	....	....	....	....	....	....	....	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	1	....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	2	....	....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	3	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	1	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1	6	1	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....

Estimated population, 1895, 400.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

RIDGE SPRING.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
CLASS III.													
Diseases of Blood and Circulatory Organs.													
Heart—Fatty Degeneration	....	....	....	....	....	....	....	....	....	....	....	1	....
CLASS V.													
Nervous System.													
Brain—Congestion of	....	1	....	....	....	....	....	....	....	....	....	....	1

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January	..	..	1	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
February	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	..	..	1	..	..	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	1	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	1	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	....	....	2	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Well. Estimated population, 1895, 300. Total area of the city, square miles, 2¼. Number inhabited houses in city, 73.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

ROWESVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class V.													
Nervous System.													
Convulsions	....	....	....	....	....	....	1	....	....	....	....	....	....
Class VI.													
Digestive System.													
Diarrhœa	....	....	....	....	....	1	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	1	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
July	1	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	1	1	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February														
March														
April														
May														
June	2													
July			2											
August														
September	1													
October														
November	1													
December														
Total	4		2											

Estimated population, 1895, 250. Total area of city, square miles, 1. No. inhabited houses in the city, 40.

Deaths by Towns and Cities, 1898

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

SPRINGFIELD.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class V. Nervous System.													
Apoplexy	....	....	....	....	....	....	1	....	....	....	....	....	1
Paralysis	....	1	....	....	....	....	....	....	....	....	....	....	1

Months.	Ages.								Social Condition.			Nativities.				Sex.			
																White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
February	..	..	..	..	..	....	1	....	....	....	....	1	....	....	....	....	1	....	....	....
March	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
July	..	..	..	..	..	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....
August	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	..	..	..	..	..	1	1	....	....	....	....	1	....	....	....	....	2	....	....	....

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	1	1	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....
Total	1	1	....	....	.....	.....	.....	...	.....	.....	.....	...	.....	.....

Estimated population, 1895, 250. Number inhabited houses in city, 30.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

SUMMERVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I. Infectious Diseases.													
Fever—Malarial	....	....	....	....	....	1	....	....	....	....	....	....	....
Tuberculosis—Concumption	1	3	....	2	....	2	1	....	....	....	....	....	....
Tuberculosis—Acute	1	....	....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of Lungs	....	....	....	....	....	....	1	3	....	....	....	....	....
Class III. Diseases of Blood and Circulatory Organs.													
Heart—Paralysis of	1	....	....	....	....	....	....	....	....	....	....	....	....
Ac Toxannia	1	....	....	....	....	....	....	....	....	....	....	....	....
Class IV. Respiratory Organs.													
Bronchitis	....	....	1	....	....	....	....	....	....	....	....	....	....
Nut. Stremoses	....	....	....	....	....	....	1	....	....	....	....	....	....
Class V. Nervous System.													
Apoplexy	....	....	1	....	....	....	....	....	....	....	....	....	....
Meningitis—Cerebral	....	....	....	....	....	1	....	....	....	....	....	....	....
Meningitis—Spinal	....	....	....	....	....	....	1	....	....	....	....	....	....
Paralysis	....	....	....	....	....	....	1	1	....	....	....	....	....
Class VI. Digestive System.													
Enteritis	....	....	....	....	....	1	....	....	....	....	....	....	....
Colitis	....	....	....	....	....	1	....	....	....	....	....	....	....
Diarrhœa	....	....	....	1	....	....	....	....	....	....	....	....	....
Jaundice	....	....	....	....	....	....	1	....	....	....	....	....	....
Class VII. Urinary Diseases.													
Brights Disease	....	....	1	....	....	1	....	....	....	....	....	....	....
Class X. Nutritional Diseases.													
Marasmus	....	....	....	....	....	1	....	....	....	....	....	....	....
Class XI. Deaths from Violence. Order 1.—Accidental.													
Poison	....	1	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	..	..	..	1	2	....	1	....	....	....	....	....	....	....	....	....	2	1	1	....
February	1	1	..	..	..	2	....	....	....	....	....	....	....	....	....	....	1	....	2	1
March	..	1	..	..	..	1	1	....	....	....	....	....	....	....	....	....	1	1	....	1
April	1	..	1	1	..	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1
May	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
June	4	..	1	1	2	....	....	....	....	....	....	....	....	....	....	....	2	....	2	4
July	1	3	..	..	2	1	1	....	....	....	....	....	....	....	....	....	2	1	2	3
August	1	..	..	..	2	1	....	....	....	....	....	....	....	....	....	....	2	2	....	....
September	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
November	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	8	5	2	3	8	5	3	....	....	....	....	....	....	....	....	....	10	5	9	10

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	1	....	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	1	....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	....	....	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	2	....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Estimated population, 1895, 3,000.

Deaths by Towns and Cities, 1898.

Sex, Nativity. Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

SUMTER.

Cause of Death.	Months.												Total.
	Jannary.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	1	1	....	....	....	1	....	3
Fever—Malarial	....	....	1	1	....	1	2	2	5	2	2	....	16
Membraneous croup	....	....	....	....	....	....	....	....	....	....	1	....	1
Whooping cough	....	....	....	....	1	1	....	....	....	....	....	....	2
Influenza	....	3	....	....	....	....	....	....	....	....	....	....	3
Pyæmia	....	....	....	....	....	....	1	....	....	....	....	....	1
Tuberculosis—Consumption	3	....	4	2	....	2	....	2	....	....	....	....	13
Tubercular of intestines	....	....	....	....	....	1	....	....	....	....	....	....	1
Class II. Constitutional Diseases.													
Titamus	....	....	....	....	....	1	....	....	....	....	....	....	1
Class III. Diseases of Blood and Circulatory Organs.													
Anæmia Simple	....	....	....	....	....	....	....	....	1	....	....	....	1
Carbuncle	....	....	....	....	....	....	1	....	....	....	....	....	1
Heart—Valvular disease	....	....	1	....	2	....	1	....	....	....	1	2	7
....	....	....	....	....	1	....	....	....	....	....	....	....	1
Class IV. Respiratory Organs.													
Asthma	....	....	....	....	....	....	....	....	....	1	....	1	2
Bronchitis	....	....	1	1	....	....	....	....	....	....	....	....	2
Pneumonia—Broncho	....	....	2	1	1	....	....	1	1	....	1	5	12
Strangulation from	....	....	....	....	....	....	1	....	....	....	....	....	1
Congestion of lungs	1	....	....	....	....	....	....	....	1	....	....	....	2
Class V. Nervous System.													
Brain—Congestion of	....	....	....	....	....	....	....	....	1	....	....	....	1
Paralysis	....	....	....	....	....	....	....	1	....	....	....	....	1
Convulsions	....	....	....	1	....	....	....	....	....	....	....	....	1
Delirium Tremens	....	1	....	....	....	....	....	....	....	....	....	....	1
Cholera infantum	....	....	....	....	....	....	....	1	....	....	....	....	1
Class VI. Digestive System.													
Gastritis	1	....	....	....	1	1	1	....	1	1	....	....	6
Enteritis	1	....	1	....	....	1	....	....	....	....	....	....	3
Gastro enteritis	....	....	1	....	1	....	....	....	....	....	....	....	2
Entero—Colitis	1	....	1	....	....	....	....	....	....	....	....	....	2
Diarrhœa	....	....	1	1	1	2	....	....	....	....	....	....	5
Intestinal obstruction	....	....	....	1	....	....	....	....	....	....	....	....	1
Hemorrhage from stomach	....	....	....	....	....	1	....	....	....	....	....	....	1
Jaundice	1	....	....	....	....	1	....	....	....	....	....	....	2
Carcinoma of stomach	....	....	....	....	....	....	....	....	1	....	....	....	1
....	....	....	....	....	1	1	....	1	3	....	....	....	6
Class VII. Urinary Diseases.													
Brights disease	....	....	....	....	....	....	....	....	....	1	....	....	1
Superrating kidney	....	....	....	....	....	....	....	....	....	1	....	....	1
Class VIII. Diseases of Women.													
Carcinoma of Breast	....	....	....	....	....	1	....	....	....	....	....	1	2

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

SUMTER.—Continued.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class X. Nutritional Diseases.													
Marasmus	....	....	....	....	....	....	....	....	....	....	1	....	1
Inanition	....	....	....	....	1	....	....	1	1	1	....	....	4
Old age	....	....	1	....	....	....	....	....	....	....	....	1	2
Lack of attention	....	....	....	....	....	....	....	1	....	....	....	....	1
Class XII. Death from Violence. Order 2.—Homicidal.													
Gunshot—Wound	....	....	....	....	....	....	....	1	....	....	....	....	1
Order 3.—Suicide.													
Gunshot—Wound	....	1	....	....	....	....	....	....	....	....	....	....	1
Total	8	5	13	8	10	15	8	11	15	7	7	10	117

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1-5.	5-10	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January	4	..	..	..	3	2	....	....	....	....	....	....	....	....	....	....	2	1	4	2
February	2	1	..	..	..	2	....	....	....	....	....	....	....	....	....	....	2	....	3	....
March	2	2	1	..	4	1	2	2	....	....	....	....	....	....	....	....	3	1	6	5
April	4	1	3	..	..	....	1	....	....	....	....	....	....	....	....	....	1	....	3	5
May	5	2	1	..	1	3	....	1	....	....	....	....	....	....	....	....	4	1	5	3
June	8	4	..	3	2	....	....	....	....	....	....	....	....	....	....	....	3	1	8	5
July	3	1	..	..	1	1	2	....	....	....	....	....	....	....	....	....	4	....	1	3
August	4	4	..	2	4	....	1	....	....	....	....	....	....	....	....	....	3	1	5	6
September	4	4	..	2	4	1	....	....	....	....	....	....	....	....	....	....	....	....	6	9
October	2	1	..	..	1	1	1	....	....	....	....	....	....	....	....	....	....	2	2	2
November	2	2	..	1	1	1	....	....	....	....	....	....	....	....	....	....	2	....	2	3
December	2	1	..	1	1	3	3	....	....	....	....	....	....	....	....	....	3	....	3	5
Total	42	23	5	9	22	15	10	3	....	....	....	....	....	....	....	....	27	7	48	48

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female.	Male.	Female.										
January	3	2	3	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
February	2	....	1	3		.....	.....	.....	.....	.....	.....	.....	.....	.....
March	2	....	9	6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	1	....	1	4	1	.....	10	.....	10	.....	.....	.....	.....	.....
May	2	....	1	6	1	1	18	.....	18	.....	.....	.....	.....	.....
June	....	....	7	7	1	2	.....	.....	.....	.....	.....	.....	.....	.....
July	6	5	8	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	4	2	12	9	3	2	9	.....	9	.....	.....	.....	.....	.....
September	3	2	3	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	3	8	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	....	4	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	8	6	5	5	3	1	.....	.....	.....	.....	.....	.....	.....	.....
Total	31	17	57	62	18	7	37	.....	37	.....	.....	.....	.....	.....

Estimated population, 5,500.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

TIMMONSVILLE.

Cause of Death.	Months.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Class I. Infectious Diseases.													
Fever—Typhoid	....	....	....	....	....	....	1	....	....	....	....	....	....
Fever—Malarial	....	....	....	....	....	1	1	....	....	....	....	....	....
Tuberculosis—Consumption	....	....	....	....	....	....	....	....	....	1	....	....	....
Class IV. Respiratory Organs.													
Congestion of Lungs	....	....	....	....	....	....	1	....	....	....	....	....	....
Class VI. Digestive System.													
Entero—Colitis	....	....	....	....	1	....	....	....	....	....	....	....	....
Diarrhœa	....	....	....	....	....	....	1	....	....	....	....	....	....
Class VII. Urinary Diseases.													
Brights Disease	....	....	....	1	....	....	....	....	....	....	....	....	....
Class VIII. Diseases of Women.													
Carcinoma of Uterus	....	1	....	....	....	....	....	....	....	....	....	....	....
Class X. Nutritional Diseases.													
Old Age	....	1	....	....	....	....	....	....	....	....	....	....	....
Cause unknown	1	....	....	....	....	....	....	....	....	....	....	....	....

Months.	Ages.									Social Condition.			Nativities.				Sex.			
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	White.		Colored	
																	Male.	Female.	Male.	Female.
January	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....
February	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	2	....	....
March	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
April	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
May	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
June	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
July	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	2
August	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
September	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
October	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
November	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
December	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	....	....	....	1	1	2	....	1	....	....	....	....	....	....	....	....	2	3	1	5

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diptheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January	2	....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February	....	....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April	....	3	2	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May	....	....	....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June	1	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	2	....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August	1	....	3	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September	1	....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October	....	....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November	....	1	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December	....	....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	7	4	13	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Water supply, wells and pumps. Estimated population, 1895, 800. Total area of the city, square miles, 1.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

VARNVILLE.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Malarial						1							
Class II.													
Constitutional Diseases.													
Diabetes				1									
Class IV.													
Respiratory Organs.													
Asthma		1											
Class V.													
Nervous System.													
Epilepsy										1			
Class VI.													
Digestive System.													
Entero—Colitis								1					
Class X.													
Nutritional Diseases.													
Marasmus							1			1			

Months.	Ages.									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1-5.	5-10.	10-20.	20-40.	40-60.	60-80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January																				
February						1												1		
March																				
April						1													1	
May																				
June					1														1	
July	1																1			
August	1																1			
September																				
October	1				1													2		
November																				
December																				
Total	3				2	2											2	3	2	

Months.	Births.				Still.	Premature.	Contagious Diseases.					Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membraneous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water
	Male.	Female	Male.	Female										
January	2	1			1	1								
February	2	1												
March		1												
April	1													
May														
June		2												
July	1													
August														
September														
October														
November														
December														
Total	6	5			1	1								

Estimated population, 1895, 600. Number inhabited houses in city, 60 Total area of city, square miles, 1.

Deaths by Towns and Cities, 1898.

Sex, Nativity, Social Condition, Age, Months, Accompanied by Statement of Sanitary Condition, Water Supply and Public Improvements.

WOODRUFF.

Cause of Death.	Months.												Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Class I.													
Infectious Diseases.													
Fever—Typhoid	1												
Tuberculosis—Consumption							1						
Class VI.													
Digestive System.													
Gastritis					1			1					
Class X.													
Nutritional Diseases.													
Hysteria				1									

Months	Ages									Social Condition.			Nativities.				Sex.			
																	White.		Colored	
	Under 1.	1–5.	5–10.	10–20.	20–40.	40–60.	60–80.	Over 80.	Unknown.	Single.	Widowed.	Married.	United States.	Germany.	Unknown.	Other For'n Countries.	Male.	Female.	Male.	Female.
January					1													1		
February																				
March																				
April					1													1		
May					1							1					1			
June																				
July				1															1	
August																				
September																				
October																				
November																				
December																				
Total				1	3							1					1	2	1	

Months.	Births.				Still.	Premature.	Contagious Diseases.					*Water Supply.		
	White.		Colored				Cases Reported.	Diphtheria.	Smallpox.	Membranous Croup.	Scarlet Fever.	Well.	Cistern.	Lake Water.
	Male.	Female.	Male.	Female.										
January														
February			1											
March														
April	1	1												
May														
June														
July														
August	1													
September														
October														
November														
December														
Total.	2	1	1											

*Well. Estimated population, 1895, 500.

Stations.	County.	Climatological Data for the Year 1898.															
		Temperature in Degrees (Fahrenheit).					Precipitation in Inches.						Number of Rainy Days	Sky.			Prevailing Direction of Wind.
		Annual Mean.	Highest.	Date.	Lowest.	Date.	Total for the Year.	Greatest Monthly.	Month.	Least Monthly.	Month.	Total Snowfall.		Number of Clear Days.	Number of Partly Cloudy Days.	Number of Cloudy Days.	
Allendale	Barnwell	b66.1	101	May 30	15	Dec. 27	b61.58	17.90	August	1.07	May	. . .	*74	*190	*33	*105	.....
Anderson	Anderson	.....	.....	.....	.....	.....	53.09	9.34	August	0.95	Feb.	....	107	228	2	135	W.
Augusta, Ga.	Richmond	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Batesburg	Lexington	63.7	103	June 29	11	Feb. 2	38.74	7.00	July	0.62	Feb.	T	89	253	43	107	.....
Blackville	Barnwell	64.8	102	May 30	14	Feb. 2	48.14	8.43	July	0.52	Feb.	T	115	147	132	36	N. E.
Camden	Kershaw	.....	.....	.....	.....	.....	55.06	13.55	August	1.01	Feb.	0.4	117	152	122	91	S. W.
Central	Pickens	b63.5	100	June 9	8	Jan. 2	b48.48	12.03	August	0.55	May	0.9	*59	.....	.....	.....	.....
Charleston	Charleston	66.8	98	May 30	26	Feb. 2	46.42	12.99	July	0.19	Jan.	....	119	113	189	63	S. W.
Charlotte, N. C.	Mecklenburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cheraw	Chesterfield	62.4	103	May 30	10	Feb. 2	41.78	7.43	July	1.02	Dec.	1.0	122	156	68	141	N. E.
Clemson College	Oconee	60.4	99	June 10	10	Feb. 10	50.18	10.31	July	0.97	Feb.	0.5	121	163	91	111	N. E.
Columbia	Richland	63.8	101	May 30	14	Feb. 2	49.53	12.17	July	0.60	Feb.	0.2	113	126	118	121	N. E.
Conway	Horry	.....	.....	.....	.....	.....	47.01	9.54	August	0.95	Jan.	...	80	163	83	119	N.
Darlington	Darlington	.....	.....	.....	.....	.....	46.82	8.30	June	1.00	Feb.	0.6	111	132	173	60	.....
Edisto	Bamberg	.....	.....	.....	.....	.....	43.98	7.61	April	0.81	Feb.	....	91	155	101	109	S. W.
Effingham	Florence	.....	.....	.....	.....	.....	45.45	12.12	August	0.84	Feb.	0.5	115	163	96	106	S. W.
Florence	Florence	b65.2	100	May 30	13	Jan. 3	b34.87	8.39	July	0.69	Feb.	0.2	b92	.....	.....	.....	.....
Gaffney	Cherokee	.....	.....	.....	.....	.....	43.97	7.08	July	0.73	Feb.	0.3	109	149	125	91	.....
Georgetown	Georgetown	65.5	99	June 27	19	Feb. 2	47.75	8.50	July	T	Sept.	....	77	288	10	67	S. W.
Gillisonville	Hampton	66.0	106	May 30	12	Feb. 2	67.79	24.42	August	0.25	Jan.	T	99	*169	*109	*81	S.
Greenville	Greenville	58.9	94	June 11	9	Dec. 15	55.40	11.20	July	0.80	Feb.	0.5	117	197	23	145	.....
Greenwood	Greenwood	61.6	103	June 11	15	Feb. 2	45.05	7.18	August	0.57	Feb.	T	102	211	13	141	.....

Stations.	County.	Climatological Data for the Year 1898.															
		Temperature in Degrees (Fahrenheit).					Precipitation in Inches.					Number of Rainy Days	Sky.			Prevailing Direction of Wind.
		Annual Mean.	Highest.	Date.	Lowest.	Date.	Total for the Year.	Greatest Monthly.	Month.	Least Monthly.	Month.	Total Snowfall.		Number of Clear Days.	Number of Partly Cloudy Days.	Number of Cloudy Days.	
Holland	Anderson	59.7	99	July 1	9	Dec. 15	52.77	7.70	Angust	1.08	Feb.	1.5	99	b130	b99	b78	.....
Kingstree	Williamsburg	64.4	101	June 28	14	Feb. 2	45.15	11.18	August	0.90	Jan.	T	124	156	93	116	S. W.
Little Mountain	Newberry	62.4	103	May 30	11	Feb. 2	41.57	6.46	July	0.64	Feb.	T	102	125	172	68	W.
Longshore	Newberry	b58.7	101	May 30	11	Feb. 2	45.14	9.92	July	0.83	Feb.	T	116	92	127	146	S.
Mt. Carmel	Abbeville	.....	.....	.....	.....	.....	56.88	10.34	Sept.	0.43	Feb.	T	101	156	130	79	S. W.
Pinopolis	Berkeley	63.5	94	June 28	20	Feb. 2	62.18	14.85	August	0.57	Jan.	....	119	105	146	114	N. E.
Port Royal	Beaufort	67.0	99	July 21	23	Jan. 2	61.39	24.68	August	0.23	Jan.	....	90	160	150	55	S.
St. Georges	Dorchester	64.8	98	May 30	17	Feb. 2	45.85	7.59	August	0.34	Feb.	....	99	157	84	124	.....
St. Matthews	Orangeburg	64.1	100	May 30	11	Feb. 2	43.82	7.66	August	0.88	Feb.	T	104	160	88	117	.....
St. Stephens	Berkeley	.....	.....	.....	.....	.....	56.04	14.66	August	0.64	Jan.	0.5	118	144	90	131	N. W.
Santuc	Union	60 4	100	May 30	10	Feb. 2	42.04	8.54	July	0.85	May	0.2	114	110	166	89	W.
Shaw's Fork	Aiken	64.0	103	May 30	11	Feb. 2	52.29	9.63	August	0.66	Feb.	T	94	107	196	62	S. W.
Smith's Mills	Williamsburg	.....	.....	.....	.....	.....	56.95	9.74	August	1.00	Jan.	0.4	105	161	83	121	S.
Society Hill	Darlington	63.0	98	May 30	16	Feb. 1	48.45	9.27	July	1.19	Feb.	1.0	92	127	167	71	N. E.
Spartanburg	Spartanburg	b59.6	99	June 11	14	Feb. 2	a44.05	6.90	July	0.70	Feb.	1.0	a77	.....	.....	.....	.....
Statesburg	Sumter	64.4	101	May 30	17	Feb. 2	42.52	8.36	August	1.12	Feb.	0.4	117	130	113	122	S. W.
Trenton	Edgefield	64.7	98	May 30	19	Jan. 2	51.48	11.37	July	0.52	Feb.	T	100	*129	*153	*77	S.
Trial	Berkeley	62.7	96	July 20	12	Feb. 2	67.32	15.20	August	0.62	Feb.	....	118	143	125	97	N. W.
Walhalla	Oconee	59.0	97	June 10	9	Dec. 13	53.54	9.00	July	0.60	Feb.	1.0	91	155	123	87	E.
Winnsboro	Fairfield	a61.5	100	May 30	11	Feb. 2	a41.45	7.96	August	0.58	Feb.	T	a70	a193	a100	a41	S. W.
Yemassee	Beaufort	65.7	102	May 30	18	Feb. 2	52.08	10.35	August	0.59	Jan.	....	85	164	84	117	.....
Yorkville	York	62.7	102	June 10	14	Feb. 2	48.12	9.03	August	1.07	Feb.	1.0	107	143	111	111	S. W.

a For 11 months. b For 10 months. * Data not complete.

J. W. BAUER, Section Director.

U. S. DEPARTMENT OF AGRICULTURE.

South Carolina Section, Climate and Crop Service, Weather Bureau.

Stations.	Monthly and Annual Mean Temperature for 1898.												Annual.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Allendale	.....	44.0	58.8	58.3	74.0	79.4	79.2	78.7	75.4	61.4	53.8	42.3	.....
Augusta, Ga	51.2	46.1	61.8	58.9	75.4	80.6	80.6	79.4	76.0	64.0	52.0	47.8	64.5
Batesburg	49.4	45.3	58.2	57.6	74.3	81.8	81.8	80.6	75.6	63.4	50.2	45.7	63.7
Blackville	51.4	46.7	61.2	59.1	75.1	81.4	81.2	80.0	76.3	65.0	52.7	47.4	64.8
Central	44.8	.....	.....	56.2	73.6	80.6	79.4	77.6	71.8	50.6	47.3	42.8	.....
Charleston	54.9	50.1	61.6	63.0	74.8	80.2	81.4	81.0	78.3	67.6	56.9	51.2	66.8
Charlotte, N. C.	45.0	41.6	55.1	55.8	71.9	77.4	78.3	77.2	73.0	60.5	47.6	43.0	60.6
Cheraw	47.6	42.2	58.3	56.2	73.2	79.5	80.5	80.1	75.4	63.6	49.6	43.5	62.4
Clemson College	45.8	41.0	56.4	55.2	71.8	79.4	79.0	78.0	72.6	60.6	44.3	41.2	60.4
Columbia	49.9	45.0	60.0	58.0	74.9	80.4	80.4	80.0	76.0	63.5	51.0	46.0	63.8
Florence	46.2	44.2	59.2	51.6	73.8	80.2	81.8	80.6	76.0	64.4	.....	46.1	.....
Georgetown	52.7	47.6	62.9	61.8	74.6	79.9	81.4	80.0	78.6	60.2	55.8	50.2	65.5
Gillisonville	53.0	48.6	63.7	61.0	75.6	81.5	80.7	80.0	76.9	66.5	54.7	49.4	66.0
Greenville	44.2	40.2	54.2	53.8	68.6	76.2	76.9	76.6	72.1	60.0	46.1	40.6	58.9
Greenwood	47.4	42.0	56.8	56.6	75.2	81.4	80.8	79.8	74.2	60.1	43.6	39.8	61.6
Holland	44.8	40.5	55.8	53.4	69.2	77.7	77.6	76.3	72.2	58.8	46.8	43.0	59.7
Kingstree	50.4	42.0	60.1	58.0	75.5	80.8	82.0	80.4	76.2	64.3	53.2	48.8	64.4
Little Mountainn	48.6	44.1	58.0	56.9	74.2	79.9	79.3	78.2	74.2	61.6	49.0	44.6	62.4
Longshore	47.6	42.2	57.0	55.8	73.2	78.9	.....	.....	.....	60.2	48.6	45.2	.....
Marion	.....	47.6	60.2	58.6	74.8	.....	.....	.....	.....	.....	51.8	.....	.....
Pinopolis	51.5	46.7	59.8	58.6	71.5	76.8	78.9	77.3	75.2	64.1	53.8	48.3	63.5
Port Royal	53.6	30.9	62.6	63.3	76.3	81.8	82.0	81.1	77.8	67.4	56.8	49.9	67.0
Raleigh, N. C.	45.0	40.8	55.2	55.8	70.0	76.0	79.5	78.8	73.4	61.6	48.9	44.0	60.7
St. Georges	51.8	46.0	61.9	59.3	74.8	79.9	80.7	80.0	76.6	64.7	53.5	48.4	64.8

U. S. DEPARTMENT OF AGRICULTURE.

South Carolina Section, Climate and Crop Service, Weather Bureau.—Concluded.

Stations.	Monthly and Annual Mean Temperatures for 1898.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
St. Matthews	51.4	45.0	59.2	59.0	74.8	79.6	80.4	79.8	75.8	63.9	52.4	47.9	64.1
Santuc	46.0	41.4	56.1	54.8	70.3	75.8	78.8	77.4	73.4	60.8	47.2	43.0	60.4
Savannah, Ga	55.5	51.2	64.0	63.6	76.0	80.4	81.2	80.3	78.0	67.8	57.2	51.4	67.2
Shaw's Fork	51.8	44.9	64.2	60.6	76.7	80.8	79.0	78.1	75.6	63.4	50.6	43.8	64.0
Society Hill	48.9	43.5	59.1	58.4	73.6	79.3	80.4	80 0	74.6	63.0	50.2	45.4	63.0
Spartanburg	44.0	39.8	54.4	.....	.....	79.0	79.7	77.9	73.0	59.9	45.8	43.0	.....
Statesburg	50.5	45.6	50.5	59 5	75.0	80.5	80.5	7.90	76.1	64.4	52.8	48.0	64.4
Summerville	.....	.....	.....	.....	.....	.....	.....	78.1	75.3	64.4	54.3	49.7	.....
Trenton	51.2	47.5	61.6	59.8	75.4	81.0	80.2	79.0	76.1	65.0	52.7	47.8	64.7
Trial	54.0	45.6	58.6	56.0	70.7	76.5	77.7	76.6	74.6	63.6	53.0	47.2	62.7
Walhalla	43.6	40.8	54.4	54.5	68 8	76.1	76.2	75.6	71.1	58.0	46.4	42.0	59.0
Wilmington, N. C	50.4	45.6	59.4	58.5	71.6	77.0	79.0	78.0	75.7	64.5	53.8	48.4	63.6
Winnsboro	45.0	42.6	57.1	56.3	73.4	78.7	78.7	78.0	73.4	.....	49.1	43.8	.....
Wolling	.....	.....	.....	.....	.....	.....	.....	.....	73.6	61.8	48.6	.....	.....
Yemassee	52.6	58.0	62.4	60.3	75.4	81.0	82.0	81.2	77.7	63.6	53.9	48.4	65.7
Yorkville	47.4	44.5	57.6	58.0	75.2	79.9	79.7	78.3	74.1	62.6	49.7	45.2	62.7
Averages	49.2	44.5	59.1	58.0	73.8	79.7	80.0	78.7	76.0	62.9	51.0	45.9	63.2
Normals	46.0	50.0	54.0	62.8	70.8	77.5	79.8	78.8	74.1	64.0	55.1	48.3	63.4

J. W. BAUER, Section Director.

Stations.	Monthly Maximum Temperatures for 1898.												Monthly Minimum Temperatures for 1898.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Allendale	...	75	85	84	101	99	99	94	92	86	79	72	...	15	28	34	42	60	56	67	55	31	23	15
Augusta, Ga	77	74	87	84	99	97	97	93	92	89	77	73	18	19	34	35	44	64	57	69	57	33	26	25
Batesburg	71	73	85	85	102	103	101	99	95	89	75	74	17	11	31	32	42	61	57	69	52	32	23	21
Blackville	80	78	89	87	102	101	101	94	95	90	81	75	17	14	30	35	43	60	59	67	53	31	26	24
Central	73	....	....	83	98	100	97	92	89	83	72	66	8	..	....	25	39	59	64	62	53	31	19	12
Charleston	77	76	81	82	98	94	98	90	89	84	77	71	27	26	39	43	50	67	65	72	64	39	30	29
Charlotte, N. C	72	69	84	82	95	97	97	92	90	84	73	68	15	12	28	30	42	58	58	65	53	34	22	15
Cheraw	77	75	89	87	87	103	99	94	96	90	76	71	17	10	30	29	41	56	59	66	54	33	23	14
Clemson College	72	71	82	82	97	99	98	94	95	86	72	68	10	10	24	27	40	58	58	57	56	31	14	11
Columbia	78	76	89	85	101	99	98	94	95	88	75	75	17	14	30	33	44	61	57	69	55	34	24	22
Florence	68	70	86	78	100	98	99	95	93	89	....	72	13	16	33	34	43	60	61	66	55	35	....	19
Georgetown	77	73	86	84	98	99	98	92	92	80	77	75	21	19	34	37	48	61	67	71	60	40	28	26
Gillisonville	81	78	92	91	106	105	101	97	93	87	80	77	15	12	32	30	42	56	60	66	57	35	24	24
Greenville	75	74	80	79	93	94	94	90	90	85	72	69	15	12	22	31	39	60	57	65	52	32	22	9
Greenwood	72	73	84	84	102	103	102	95	91	85	74	69	16	15	29	34	41	60	59	68	51	30	21	17
Holland	74	72	83	81	96	98	99	90	88	86	75	69	10	11	24	26	41	56	58	65	52	28	18	9
Kingstree	77	74	87	87	100	101	101	96	96	90	76	74	18	14	28	30	45	63	60	66	55	33	26	27
Little Mountain	75	76	89	85	103	101	101	98	94	89	78	72	14	11	27	26	40	58	54	66	49	29	18	15
Longshore	76	72	85	82	101	98	99	.....	....	88	78	71	15	11	26	27	40	58	56	66	52	29	20	17
Pinopolis	72	72	85	82	93	94	94	88	87	81	75	68	23	20	32	38	50	64	64	72	62	40	29	29
Port Royal	73	72	81	81	98	98	99	92	88	83	76	68	23	24	38	41	49	65	63	71	63	40	31	31
Raleigh, N. C	73	70	87	86	94	97	96	93	90	86	73	68	16	14	38	30	41	56	61	66	51	36	24	14
St. George's	78	75	88	85	98	98	98	94	92	86	79	75	20	17	31	37	46	61	61	68	58	35	27	26
St. Matthews	79	77	87	85	100	98	99	97	94	87	78	73	18	11	32	35	46	59	60	69	58	36	26	22
Santuc	72	71	85	81	100	98	96	93	90	87	74	68	13	10	29	28	41	55	59	66	51	31	21	10
Savannah, Ga	79	76	87	86	101	97	99	92	91	89	79	73	23	23	37	42	48	65	63	69	64	39	31	31
Shaw's Fork	81	77	90	92	103	102	97	97	94	87	82	68	12	11	30	31	44	65	57	63	48	31	23	19
Society Hill	74	72	86	84	98	97	95	94	90	88	74	69	20	16	30	35	46	60	61	67	56	37	26	20
Spartanburg	72	70	85	84	99	99	98	98	89	85	70	67	15	14	28	....	....	59	57	66	51	32	22	16
Stateburg	76	75	87	85	101	100	98	91	92	87	79	74	18	17	31	34	44	60	59	67	57	36	25	20
Summerville	.....	.....	.....	.....	.....	.....	.....	89	89	83	78	73	.....	.....	.....	.....	.....	.....	.....	70	58	88	26	26

UNITED STATES DEPARTMENT OF AGRICULTURE.—Concluded.

South Carolina Section, Climate and Crop Service, Weather Bureau.

Stations.	Monthly Maximum Temperatures for 1898.												Monthly Minimum Temperatures for 1898.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	Deeember.
Trenton	73	72	84	82	98	96	95	92	93	85	75	70	19	20	34	36	45	55	58	69	56	34	25	23
Trial	82	75	88	84	95	95	96	90	91	81	79	73	19	12	25	29	40	56	59	66	55	32	25	24
Walhalla	74	75	85	81	94	97	96	89	90	86	75	67	9	10	22	26	39	56	57	64	54	31	19	9
Winnsboro	74	73	85	89	100	98	97	92	90	....	73	66	14	11	31	30	42	60	55	68	54	....	21	17
Yemassee	78	76	88	87	102	101	101	97	93	87	80	75	18	18	33	34	44	60	61	69	59	35	27	27
Yorkville	75	74	87	87	99	102	98	93	91	86	77	71	18	14	28	32	44	59	59	67	53	35	28	27

Stations.	Monthly and Annual Precipitation for the Year 1898.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Allendale	.....	0.60	1.36	5.33	1.07	4.47	9.40	17.90	9.02	3.85	5.80	3.08	a61.58
Anderson	3.83	0.95	4.16	4.03	1.03	3.98	9.01	9.34	5.5.	4.83	3.27	3.16	53.09
Augusta, Ga	1.72	0.53	3.14	4.96	0.52	3.92	6.70	9.25	2.92	2.84	5.10	2.39	43.99
Batesburg	2.20	0.62	3.32	4.90	2.20	2.14	7.00	5.98	1.12	2.20	5.20	1.96	38.74
Blacksville	1.37	0.52	2.63	6.77	1.13	3.82	8.45	7.17	4.67	3.25	5.05	3.33	48.14
Camden	1.83	1.01	3.45	4.88	0.85	4.91	11.62	13 55	3.31	3.41	4.70	1 54	55.06
Central	4.06	.....	.....	3.72	0.55	1.58	6.96	12 03	6.50	5.43	3.52	4.13	b48.48
Charleston	0.19	0.51	1.71	2.50	0.64	4.68	12.99	11.34	1.49	3.44	4.63	2.32	46.42
Charlotte, N. C	2.08	0.81	5.83	2.71	2.08	3.79	4.82	8.74	4.04	3.63	2.42	2.12	43.07
Cheraw	2.00	1.48	3.16	5.08	2.16	7.59	7.86	7.07	2.93	2.51	4.61	1.77	48.19
Clemson College	3.45	0.97	3.20	3.63	0.85	1 71	10.31	7.91	5 52	5.94	3.01	3.68	50.18
Columbia	1.78	0.60	3.29	4.90	1.15	3.12	12.17	9.85	3.04	2.39	5 78	1.46	49.53
Conway	0.95	1.82	2.89	4.27	1.86	5.05	6.00	9.54	3.96	2.73	4.43	3.51	47.01
Darlington	1.47	1.00	2.64	5.68	0.97	8.30	5.57	8.12	4.36	1.87	5 62	1 42	46.82
Edisto	1.13	0.81	2.96	7.61	1.50	4.00	5.25	7.52	2.24	2.94	5.71	2.31	43.98
Effingham	1.05	0.84	2.03	4.81	1.19	3.40	4.72	12.12	4.21	2.21	5 13	3.72	45.43
Florence	1.08	0.69	1.44	4.13	1.57	5.20	8.69	7 20	5 21	1.94	.....	2.15	a34.87
Gaffney	2 68	0.73	3.76	4.40	0.74	2.27	7 08	4.28	6.03	3.78	2.90	3.17	43.97
Georgetown	2 50	2.00	2.75	4.96	1.90	5.00	8.50	6.20	.....	4.50	5.30	4.15	47.75
Gillisonville	0.25	0.74	1.61	6.07	1.45	2.47	7.64	24.42	2.70	7.89	6.41	6.52	67.79
Greenville	3 54	0.80	3.42	4.51	1.50	2.18	11.20	10 10	6.31	5.26	3.35	3.29	55.46
Greenwood	2.50	0.57	3.77	4.12	1 65	4.15	4.92	7.18	4.44	5.59	3.85	2.22	45.06
Holland	3.60	1.03	4.75	6.23	0.65	1.67	7.56	7.70	5.95	6.53	3.52	3.58	52.77
Kingstree	0.90	1.04	2.63	4.97	2.51	2.40	5.49	11.18	3.81	1.90	5.93	2.39	45.15
Little Mountain	1.80	0.64	4.80	5.75	1.51	3.80	6.46	5.15	3.31	2.16	4.91	1.28	41.57
Longshore	2.57	0.83	4.92	4.83	0.50	3 69	9.92	6.51	2.57	2.33	4.51	1.95	45.13
Mt. Carmel	2.54	0.43	4.22	5.05	0.98	2.77	8.93	8.30	10.34	6.13	3.78	3.41	56.88

U. S. DEPARTMENT OF AGRICULTURE.

South Carolina Section, Climate and Crop Service, Weather Bureau.

Stations.	Monthly and Annual Precipitation for the Year 1898.												Annual.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Pinopolis	0.57	0.67	2.85	5.43	3.70	10.68	6.13	14.85	3.45	4.52	5.18	4.15	62.18
Port Royal	0.23	0.52	2.66	3.75	1.11	2.54	9.30	24 68	2.93	6.00	5.74	2.23	61.39
Raleigh, N. C.	1.81	0.42	4 16	3.05	7.46	3.28	6.48	5.13	3.95	3.00	2.73	1.88	43.35
St. Georges	0.44	0.34	1.95	6.10	0.80	5.38	6.97	7.59	3.00	3.28	6.37	3.55	45.85
St. Matthews	1.05	0.88	2.69	5.57	1.63	4.38	7:46	7.66	3.20	2.11	5.17	2.02	43.82
St. Stephens	0.64	0.75	2.66	5.00	2.68	6.54	6.89	14.66	3.47	2.00	5.60	4.15	56.04
Santuc	2.48	0.96	4.83	4.72	0.85	2.16	8.54	6.39	2.60	3.54	3.23	1.74	42.04
Savannah, Ga	0.36	0.56	1.93	2.46	1.01	4.58	8.53	22.79	5.06	4.46	6.28	2.16	60.18
Shaw's Fork	2.24	0.66	4.76	5.90	1.20	6.53	5.87	9.63	3.01	4.88	5.52	2.39	52.29
Smith's Mills	1.00	1.45	3.15	5.61	5.07	5.52	7.16	9.74	5.76	3.04	6.00	3.45	56.95
Society Hill	1.78	1.19	4.20	5.99	2.48	4.57	9.27	7.73	3.17	1.58	5.21	1.28	48.45
Spartanburg	2.78	0.70	2.72	3.64	0.92	3.83	6.90	6.82	5.44	4.90	2.59	3.73	44.05
Stateburg	1.48	1.12	2.71	5.65	1.12	2.65	6.73	8.36	2.58	3.61	5.44	1.47	42.92
Summerville	.....	.....	.....	.....	.....	.....	7.17	11.27	3.85	7.66	6.27	3.70	.....
Trenton	2.10	0.52	5.38	5.64	0.59	2.29	11.37	6.32	5.58	4.18	5.23	2.28	51 48
Trial	0.93	0.62	3.13	5.42	6.31	7.16	9.60	15.20	2.98	4.90	6.09	4.97	67.32
Walhalla	4.03	0.60	5.07	4.54	1.28	1.85	9.00	7.69	5.38	5.45	3.20	5.45	53.54
Wilmington, N. C.	1.40	3.27	1.52	2.40	2.51	4.59	7.03	5.93	1.28	7.56	2.67	2.40	42.56
Winnsboro	2.29	0.59	4.96	4.26	1.00	6.40	6.83	7.96	1.33	.....	4.57	1.26	a41.45
Welling	.....	.....	.....	.....	.....	.....	.....	.....	2.27	2.11	4.26	.....	.....
Yemassee	0.19	0.90	1.54	7.29	1.33	3.03	6.80	10.35	7.93	1.08	5.93	4.81	52.08
Yorkville	2.82	1.07	5.06	3.85	1.32	3.54	6.18	9.03	4.64	5.94	2.58	2.09	48.12
Averages	1.80	0.86	2.99	5.05	1.35	4.15	7.81	9.81	4.06	3.82	4.72	2.84	49.26
Normals	4.40	3.66	4.46	3.14	4.02	4.62	6.02	6.13	4.94	3.10	2.61	3.14	50.24

a For 11 months. b For 10 months.

J. W. BAUER, Section Director.

In the following list the dates of the last killing frost in the spring, and the first killing frost in the autumn are given:

Stations.	Last of Spring.	First of Autumn.
Allendale	March 6	October 27.
Batesburg	March 2	October 27.
Blackville	March 5	November 25.
Camden	April 8	October 27.
Central	April 7	October 19.
Charleston	January 2	November 27.
Cheraw (1)	April 8	November 1.
Cheraw (2)	April 8	October 27.
Columbia	April 7	November 25.
Clemson College	March 1	October 15.
Conway		October 27.
Edisto	April 8	November 27.
Effingham		October 27.
Florence	February 28	October 28.
Gaffney City	April 28	October 27.
Georgetown	February 23	November 27.
Gillisonville	April 8	November 25.
Greenville	April 8	November 25.
Greenwood	March 5	October 27.
Holland	April 8	November 1.
Kingstree	April 8	October 27.
Little Mountain	April 7	October 27.
Longshore	April 28	October 23.
Marion	February 28	November 1.
Mt. Carmel	April 8	
Pinopolis	March 1	November 25.
Port Royal	February 22	November 27.
St. Georges	April 7	November 27.
St. Matthews	April 7	November 25.
St. Stephens		October 27.
Santuc	April 8	October 27.
Shaw's Fork	April 7	October 19.
Smith's Mills		November 27.
Society Hill	March 1	November 24.
Spartanburg	April 7	October 28.
Statesburg	April 28	November 25.
Summerville		November 25.
Trenton	March 5	October 27.
Trial	April 23	October 27.
Walhalla	April 8	October 23.
Winnsboro	April 7	November 25.
Wolling		November 25.
Yemassee	April 7	November 27.
Yorkville	April 8	October 23.

J. W. Bauer, Section Director.